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Table of Contents.

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	Page.
ORIGINAL ARTICLES—	
An Address, by Harold W. Horn	77
Report on an Outbreak of Epidemic Diarrhœa of the Newborn, by Kate I. Campbell	79
REVIEWS—	
Elementary Practical Chemistry	84
Diseases of the Chest	84
LEADING ARTICLES—	
The White Race in the Tropics	85
CURRENT COMMENT—	
Medicine in Ancient Mesopotamia	86
Dental Caries	86
The Diagnosis of Hæmorrhage in Man	87
ABSTRACTS FROM MEDICAL LITERATURE—	
Surgery	88
BRITISH MEDICAL ASSOCIATION NEWS—	
Annual Meeting	90
NATIONAL EMERGENCY MEASURES—	
Medical Certificates Required in Support of Applications for Various Civilian Requirements	97
POST-GRADUATE WORK—	
Courses in Melbourne	97
CORRESPONDENCE—	Page.
Injuries by Unknown Agents to Bathers in North Queensland	98
The Red Cross Blood Transfusion Service and Hypertensive Blood Donors	98
OBITUARY—	
John Lockhart Gibson	99
Arthur Charles Frederick Halford	99
Cecil Valentine Roper	99
NAVAL, MILITARY AND AIR FORCE—	
Appointments	99
NOMINATIONS AND ELECTIONS	99
HONOURS—	
New Year Honours	100
AUSTRALIAN MEDICAL BOARD PROCEEDINGS—	
New South Wales	100
BOOKS RECEIVED	100
DIARY FOR THE MONTH	100
MEDICAL APPOINTMENTS: IMPORTANT NOTICE	100
EDITORIAL NOTICES	100

An Address.[1]

By HAROLD W. HORN,

President of the Queensland Branch of the British Medical Association.

My induction as President of the Queensland Branch is indeed a very great honour, but my pride in receiving it is qualified by humility, for I confess to but a very poor conceit when I weigh the high responsibility attaching to the office. However, my knowledge that the council, which I am to serve, is eminently able and enthusiastic affords some leavening of the prospective burden; and indeed, without its guidance, I fear the chair would crumble.

I think the profession owes a tribute to its council, in that, in the five long war years, when unprecedented demands have arisen in every branch of medicine, not once has a meeting lapsed for want of a quorum, whilst its members have accepted the ever-widening ambit of our activities cheerfully and without complaint. Under their direction, and with the help of our very able and experienced office staff, I trust I shall be equal to the service you require of me.

Soon, we hope and believe, the horrors and destruction of war will be over. We recall with gratitude the deeds of those who foiled the Swastika and hurled back the sadist of Nippon, while to the indomitable and enduring courage of the peoples of Britain and the battered outposts of her great empire we owe everlasting homage.

And when peace comes, not least among the tasks before mankind throughout the world will be the repair of the devastation wrought in the lives of men, wherein our own particular duty lies in our interest in the rehabilitation of our colleagues, many of whom have shared in the dangers of war and been prey to wounds or illness or to the misery and mental decay that are inseparable from life in a prison camp.

[1] Read at the annual meeting of the Queensland Branch of the British Medical Association on December 15, 1944.

It has been truly said that successful rehabilitation depends upon the primary treatment, and this applies equally to the physical equipment of wounded men for ordinary occupations and to the restoration of medical men to professional life.

Critical consideration of the needs of the latter is based upon an evaluation of, firstly, the degree of fitness for medical practice which results from university education; secondly, the adequacy, or rather inadequacy, of a brief period of residence in hospital; and thirdly, the amount of actual experience in general medicine gained during their tenure of duty on service.

Full consideration of the second and third of these would be redundant, for the British Medical Association at least is fully aware of the answers, and I am quite sure that no one would regard as adequate primary treatment the present intentions of the Commonwealth Government, Medical Coordination Committees, or British Medical Association. The Commonwealth Government magnanimously allows three months' post-graduate study, with a payment of £3 10s. per week for a single man and slightly more for a married man and one with children; while the two last-mentioned will almost certainly be powerless to arrange more than totally unsuitable post-graduate courses, to indicate suitable openings for the establishment or purchase of practices, or to guide those who so desire into positions as *locum tenentes* or assistants, into hospital appointments *et cetera*.

But I am not at all satisfied that the tremendous professional loss these young men have suffered can be even remotely compensated by such means, for the bald and depressing fact is, and several have themselves suggested it, that surgical operative technique, pædiatrics, gynæcology and midwifery have been reduced through absence to a mere memory; and that successful rehabilitation demands not merely a few short post-graduate lectures and demonstrations, or a brief period of watchful attendance in hospital. The young man needs reteaching in the practical aspects of these subjects—he will welcome demonstration, but he must be permitted, and should be required, to effect many techniques under expert direction, if he is to be fitted to take his place amongst his colleagues with reasonable proficiency and in a reasonable time. This is almost

an aphorism, well exemplified by a young flight lieutenant, who had less than six months' hospital experience, entirely as a physician, has never performed a major surgical operation, and has never effected an instrumental delivery or even treated a major illness without supervision. This is no isolated example, but may well apply to many of our young service doctors.

It is therefore apparent that some considerable proportion of doctors, on discharge from the services, will inevitably be doomed to certain professional disabilities, which can even be calculated on an average basis, if measured in terms of the above-mentioned departments in medical practice. Thus the primary rehabilitation treatment of these doctors necessitates post-graduate experience in hospitals, not of necessity accepted teaching hospitals, but hospitals in which they may see and effect, under supervision, the usual technical procedures common to general practice. It is, of course, contended that the demand for hospital positions will exceed their supply, but adequate training or retraining is so essential to future proficiency, that every effort should be made to provide some such opportunity for all who need it, even if releases from the services have to be controlled according to this contingency. Only by such provision will the more or less conterminant needs of service medical personnel be satisfied, and only the cooperation of governments, hospital boards and medical staffs will make it possible; for in many cases supernumerary appointments would have to be sanctioned, and these would prove probably as valuable in the smaller hospitals, where medical practice is more of a general nature, as in the highly specialized departments of the larger teaching hospitals.

I am sure that you will agree that our usual post-graduate courses, of unqualified excellence for the practising profession, would be a lamentable failure to young men whose sole experience has been limited to regimental duties over a period of years, following little, if any, hospital training, the effect of which has been as transient and productive as a dream.

I discount the suggested apprenticeship to general practitioners as being fraught with too many difficulties to be accepted as the ideal, though I recognize its value as a method holding second place to that outlined above. I feel that three months thus spent would give the young doctor at least some steady foundation for his future, and that an apprenticeship would then be invaluable. Thus would I cursorily dispose of the second and third points to be evaluated.

The first of these, relating to medical education, is a wider question, and involves a survey of the curriculum and an assessment of its faults, as has been done by the Interdepartmental Committee on Medical Schools in Great Britain, by the local University Committee on Medical Education and by others. I wish to indicate some aspects which have not been sufficiently emphasized, and to speak apart from any specific relation to rehabilitation, without prejudice or cynicism and with some hope that good may accrue.

Many leading teachers of medicine within the universities are now beginning to admit what most doctors have recognized for years, that the medical course has attained dimensions so vast that a very drastic pruning process is long overdue. What they have not so far granted is the blunt recognition that an extremely high proportion of what is taught bears but little relation to the practice of general medicine.

The most blatant example of this is the inordinate amount of biology, chemistry and physics taught in first year. Only an extremely limited amount of knowledge in these subjects ever finds clinical application, and I contend that senior matriculation in them would suffice to give the student adequate practical knowledge.

The aforementioned university committee expresses itself in much the same terms, but it then suggests general and medical physics, general biology, organic and physical chemistry and comparative vertebrate anatomy, as subjects to be included in first and second years in their place. This will in no way relieve the student of the almost intolerable burden he is now bearing if science professors remain in command, and I feel that, having satisfied the demands of the "Senior", the student should only be required to study further those things that are really concerned with medicine. And they should be taught by doctors, and not by scientists who can have no conception of the needs of the average doctor; otherwise science will still be dominant, and the student's load perhaps heavier. If it be objected that doctors are not equipped to teach such subjects (and this is my own belief), then surely the answer is that intimate knowledge of these subjects is unimportant.

I do not deprecate education in any form, but so vast has the field of medical science become that any attempt to insist on more than those general principles which are essential to its broad understanding indicates merely gross egotism on the part of the teacher, and leads to "cramming" and confusion on the part of the student. Nevertheless, the same demands for detailed knowledge in anatomy exist today as existed twenty years and more ago, while here in Queensland the examinations in this subject urgently demand revision. Even the keenest students are depressed to an extent undreamed of by the unfair and useless spot methods with time limits, which would break the heart of the most staunch amongst you. A talk with a dozen students in any year will convince you. Furthermore, intensive study of the relations *et cetera* of unimportant structures never met with in a life of medical practice, surely constitutes a waste of time, except for the future anatomist.

Physiology and biochemistry have become subjects of annually increasing magnitude, and their study demands prodigious concentration and effort. Just compare your old "Halliburton" with "Best and Taylor", or reflect upon the biochemistry you learned, and then try your hand at an examination paper set for a second year student; then you will understand. Reflect further that these subjects are taught with all the fervour that characterizes the scientist, and to such an extent that the lecturer has very largely succeeded in instilling his enthusiasm into his students. My particular point is that herein lies an example of the exaggerated importance placed upon scientific detail in relation to practical medicine, where structural formulæ play no obvious role, and where scientific dazzle vanishes and yields to commonplace diagnosis and treatment.

Neurology, too, must be subjected to similar criticism, for how many of us who once revelled in our recitation of spinal tracts and cerebral nuclei, and in our picturesque diagrams of cross sections of the brain, have retained more than mere elementary concepts of the nervous system when professional maturity has been attained? And have we been aided in neurological or other diagnosis by our memory of the *lamina terminalis* or the dentate nucleus? Surely the minutiæ of neurology might, with impunity, have been left for the neurologist.

Nor can I view with satisfaction the elevation of social and tropical medicine to so high a place in the Queensland curriculum. Its domination of two years of the course would be justified if its practice constituted even part of the responsibility of the average doctor, and this could be conceded only by those who envisage the ascendancy of the State in medical practice of the future; but as I, with many others, believe in the certainty of survival of independent or private practice, by virtue of its many aspects of superiority over "government practice", I cannot view a future where the full range of social medicine can find a place anywhere but in the domain of the specialist in this department, as is the case today. It might not be so under a comprehensive health scheme with complete government control, in which any doctor might be required to accept "public health" duties as part of his calling. This is what the State intends, if ever we yield up our precious freedom, but it is a precocious assumption to say that we shall.

With regard to tropical medicine, I am of the same opinion as the British committee, that in the absence of actual cases of tropical disease, this study is futile, and should aim at an understanding merely of the nature of the more important diseases.

I cannot fail to condemn the principle of harassing the student by insistence on the study of what is certain to be forgotten in consequence of its almost total absence from general medical practice.

Such iconoclastic utterances in regard to the preclinical years are supported by the opinions of students and doctors alike, and as for such teaching as is suggested by the high-sounding, blue-stocking nonsense that has recently appeared in British medical journals, I can only say: Heaven forbid! Philosophical theory! Conceptual orders! I know them not.

I am not inclined to discuss the final clinical years at any length, but I should like to reveal that my inquiries have elicited three important facts whose rectification should be sought.

1. Lectures in midwifery are given in fourth year, whereas clinical demonstrations commence in the fifth, and this constitutes an unnecessary divorce of theory from practice. Opinion on the closer approximation of these is unanimous, and I should like to say that with this exception, it is generally conceded that teaching of this subject is highly satisfactory, in spite of the great diminution in the number of patients available.

2. There is a dearth of clinical teachers in both medicine and surgery, and this renders personal instruction and demonstration difficult.

3. The teaching in clinical surgery is regarded as unsatisfactory, and is ascribed to the lack of teaching ability on the part of some of the tutors, even those whose surgical ability is unimpeachable.

The solution to 1 and 2 is simple, while the solution to 3 might be equally simple if surgical clinical teachers, no longer unaware of the opinion of their students (some of them now graduates), applied themselves to it.

In these words I have especially attempted to indicate that the curriculum, at least as far as preclinical studies are concerned, demands too great an amount of detail of an unnecessary kind, and thus leads to the long hours of study at night and the concentrated "cramming" prior to examinations which are familiar to all of us. If we can admit, as I do, that the greater part of the knowledge we once gained in physics, chemistry, biology, biochemistry and neurology has long since vanished, how can we justify the continued teaching of truly non-essential details in such subjects? Surely, the report of the Interdepartmental Committee on Medical Schools in Great Britain, recently published, strikes the correct note in its advocacy of the teaching of general principles, and not the inculcation of a mass of factual knowledge, in suggesting that there should be a bias towards the needs of the general practitioner (and I contend that this should be the principal basis of review), and in asking for an improvement in teaching ability.

This last-mentioned quality is never demanded by universities, and so it is that we find some lecturers and teachers, themselves academic or clinical giants, whose personality and eloquence are of so poor an order that they literally teach nothing. This is one feature of medical education in which the dean might well be given power to act, for attendance at the lectures or demonstrations of such gentlemen constitutes an unnecessary consumption of time. We have all had personal experience of them in our old student days, and I would quietly suggest that our own medical school is not without them. Ask the students, for you will never find better judges. There is no case within my knowledge where a university teacher has been dismissed because he lacked the ability to teach.

If we can accept the wisdom of a general practitioner basis of medical education, there is little need to speak of examination reform, for the two are closely interrelated. For example, the general as opposed to the specialized and highly academic training would obviously lead to examination on the same principles; and the traditional practice of requiring long answering essays to satisfy from three to five questions in three hours could, I suggest, be replaced by a larger number demanding less knowledge of detail. Such a procedure would not only relieve the examinee of unwarranted hours of reading, but would also eliminate much of the examination panic that exists; it would allow a much larger field to be covered, and would obviate to a considerable extent the element of luck, the luck of having or not having a question on a particular subject, and hence the luck of passing, or perhaps of failing.

I am confident that examination along these lines, conducted by men with knowledge and experience of the needs of general practice, with human understanding and sympathies in tune with their students, would fulfil an end unsuccessfully achieved by the old search for knowledge of detail; it would produce fewer examples of "good students" failing in professional practice, and "bad students" succeeding (for some of them were not bad). By reducing the necessity for cramming it would automically safeguard the health of students, which the committees mentioned have accepted as a university responsibility; and it would be a means of allaying a certain unrest within the university of which the faculty should be made aware.

Thus do I suggest that review of medical education should be along the lines of a general practitioner basis of training, insistence on good teaching, and reasonable examinations with diminished stress on academic principles; that large reference books should cease to be prescribed as text-books, for when they are so prescribed the student is afraid not to read them, even though absorption of their contents is impossible; and that the great profusion of scientific and specialist detail should be reserved for post-graduate study in the special branch ultimately chosen by the individual.

Such a plan would probably necessitate the abolition of the existing departmental independence, with the introduction of some degree of control by the dean, in whom experience of professional practice should be requisite.

I believe that implementation of these suggestions would at once permit the realization of other desiderata, namely, the elimination of excessive extramural reading, at present necessitated by the examination phobia, and hence time for relaxation and entertainment, and consequent safeguarding of health; the opportunity for non-medical studies of various types of literature, experience of which would have effects of cultural and civic importance; and above all perhaps, the possibility of wider human contact, with resultant broadness of outlook not obtainable within the confines of the study.

May I finally indicate the most outstanding anomaly in our Queensland Medical School: professorships abound in preclinical subjects, but in medicine and surgery there are none. I feel that rectification of this is overdue.

My years spent in the service of medicine and the pursuit of knowledge therein (for all of us are still students) have convinced me that it is a Utopian dream to visualize a graduate equipped to the full in the whole content of scientific and practical medicine; and that as the average student is destined to be the ordinary doctor, he should be guided into the profession with this object in view.

I trust I have not been unreasonable or ultrautilitarian in my contentions; and while I regret that our teachers of medicine have not seen fit to renounce tradition in relation to medical education, in favour of a curriculum based on practical requirements, I wish to assure those who have given of their best in building up the structure of medicine in the University of Queensland that I have no desire to belittle their efforts or detract in any way from the great value of their work. May the edifice they have built be like the ancient classic, "a monument more lasting than bronze".

REPORT ON AN OUTBREAK OF EPIDEMIC DIARRHŒA OF THE NEWBORN.

By KATE I. CAMPBELL.
Melbourne.

THE clinical entity known as epidemic diarrhœa of the newborn or as gastro-enteritis of the newborn has in recent years attracted considerable attention. The high mortality associated with this condition, the failure to

isolate the causative organism, and the rapidity with which it spreads through a nursery, have all combined to make it a highly dangerous disease.

In Melbourne an epidemic was experienced in 1943, the cases occurring from the beginning of May to the beginning of August. Both the public midwifery hospitals suffered—namely, the Women's Hospital and the Queen Victoria Hospital. Three attacks occurred. The first affected the premature babies' ward at the Women's Hospital and will be referred to as "Women's Hospital I". The second occurred among the premature and full-time babies at the Queen Victoria Hospital, and will be referred to as "Queen Victoria Hospital". The third occurred in the premature ward at the Women's Hospital, and will be referred to as "Women's Hospital II".

The outbreaks will be considered separately, as the treatment differed in the three series.

Season.

The Women's Hospital I outbreak began on May 11. The Queen Victoria Hospital cases occurred from May 20 to June 8. The Women's Hospital II cases occurred from July 9 to August 2—that is, the season was late autumn and winter. In America epidemics[1] have occurred all round the year, the highest incidence being in the winter.

Fifty infants were affected, 29 premature and 21 full-time infants, the details being as follows:

Women's Hospital I: Eleven premature babies.

Queen Victoria Hospital: Eight premature babies, twenty full-time babies.

Women's Hospital II: Ten premature babies, one full-time baby.

Symptoms.

The onset of diarrhœa was sudden. There was a slight rise in temperature and the infants passed stools which were characteristic. They were quite unlike the ordinary diarrhœal stools, the motions consisting of yellow fluid which on the napkin resembled highly coloured urine. No fæcal particles were visible. There was no mucus in the stool, and no blood except in two cases in which the infants survived till the seventh day, when the motions were "anchovy sauce" in colour on the day or so before death. The passage of these copious liquid stools rapidly and severely dehydrated the infant to an alarming degree, so that overnight he would look like a squeezed sponge. Vomiting was not troublesome till the final stage of the disease, when the vomitus was usually highly bile-stained. Considerable abdominal distension occurred late in the fatal cases. In some of the babies nasal discharge was present. The outstanding features were the highly unusual fluid stools and the rapid and extreme dehydration.

Sequence of Cases.

In the Women's Hospital I outbreak the epidemic was unexpected and was well established before its nature was recognized. There was therefore no reliable history of the sequence of cases. In the other two outbreaks, one or two fresh cases occurred at intervals of from one to three days. The last case in the Women's Hospital II series occurred ten days after the preceding case; this was the longest interval.

Feedings.

At the time of onset of the diarrhœa some babies were breast fed entirely, and some were having complementary or complete artificial feedings of milk, lactose and water, the mixture being simmered in a double boiler for twenty minutes. The feedings are summarized in Table I. That is, thirty-two babies were breast fed, sixteen were artificially fed and two received complementary feedings. The fact that the majority of infants were breast fed was against the supposition that the infection had been conveyed via the food. The premature infants fed on breast milk were not being put to the breast, but were given expressed breast milk by bottle, pipette or gavage. The full-time babies were, of course, going to the breast. The aseptic precautions in preparation and administration of artificial feedings appeared to be adequate and were checked over.

TABLE I.

Outbreak.	Type of Feeding.		
	Breast Milk.	Complementary.	Artificial.
Women's Hospital I ..	7	—	4
Queen Victoria Hospital..	20	2	6
Women's Hospital II ..	5	—	6

The Age at Onset.

The age at onset varied from four days to four weeks among the premature infants, and from four days to ten weeks for the full-time infants. (The infant of ten weeks was born prematurely at eight months. He was kept in hospital because his mother had mitral stenosis and cardiac failure. Since he weighed eight pounds fourteen ounces at the onset of the illness, he has been included with the full-time babies.)

The Weight at Onset.

The weight of the babies at the onset of the illness among the premature infants ranged from two pounds eight ounces to five pounds eleven ounces, and among the full-time infants from five pounds seven ounces to nine pounds twelve ounces. The details are as follows: in the Women's Hospital I outbreak the weight of affected premature infants varied from two pounds eight ounces to five pounds four ounces, the average being three pounds twelve ounces; in the Queen Victoria Hospital outbreak the weight of affected premature infants varied from three pounds eight ounces to five pounds eight ounces, the average being four pounds fourteen ounces, and the weight of affected full-time infants varied from five pounds seven ounces to nine pounds twelve ounces; in the Women's Hospital II outbreak the weight of affected premature infants varied from three pounds ten ounces to five pounds eleven ounces, the average being four pounds six ounces, and the weight of the only affected full-time infant was seven pounds.

Method of Treatment.

In the Women's Hospital I outbreak, owing to its element of tactical surprise, treatment was instituted after the infants were visibly dehydrated. It consisted of withholding food for twenty-four hours and giving by mouth as much glucose solution or 5% glucose in half-strength saline solution as possible. Glucose in saline solution was administered intravenously, and the feeding, when given, was Nestlé's sweetened condensed milk, beginning with a strength of one in sixteen. Later the strength was slowly increased. The results were very bad. Of the eleven premature infants, nine died. The duration of the disease in these cases cannot be definitely stated because of the vagueness of the date of onset. The two babies who survived were the largest in the series, weighing four pounds thirteen ounces and five pounds four ounces. It was obvious that the dehydration had produced irreversible changes and that it was necessary to forestall the fluid loss. Post-mortem examination of two of the infants revealed œdema of the lungs and fluid in the serous cavities owing to overloading of the vascular system by too zealous intravenous therapy, and one of the infants who recovered showed evidence of this condition. It should be emphasized that in treating these small premature infants the rate of intravenous administration of solution must be appropriate to the size of the baby. It would appear to be a safe rate for intravenous therapy in a baby, when using a "Soluvac" flask (in which one drop equals one minim), to give as many drops per minute as the baby weighs in pounds. This gives 2·8 ounces of fluid per pound of body weight per day. It is usually taken that the normal premature infant needs three ounces of fluid per pound of body weight per day, and the full-time infant two and a half ounces per pound of body weight per day. It is difficult to assess how much should be given in any one case to combat the dehydration, as the amount of fluid loss will vary. Field *et alii*[2] recommend giving up to ten

ounces extra per day if dehydration is present. We arbitrarily adopted a standard of a total fluid intake by the combined oral and parenteral routes of four ounces per pound of body weight per day for the premature infants, and of three or four ounces per pound for the full-time infants. As far as possible the amount vomited, if any, was checked and allowed for.

In the Queen Victoria Hospital outbreak both full-time and premature infants were affected. The full-time infants were not so seriously affected as the premature infants, though several required fluid by the parenteral route. The smaller the full-time baby, the more severe was the condition, and two or three babies occasioned much anxiety. The condition was being watched for and treatment was instituted promptly. The treatment was essentially the same—namely, initial starvation, free fluids orally, fluid given by the parenteral route and Nestlé's sweetened condensed milk as a feeding; but fluid by the parenteral route was administered earlier and the rate was more carefully controlled. Since the vomiting was slight and the diarrhœa gross, it was thought that the infants would be acidotic rather than alkalotic, and therefore some were given glucose in saline solution intravenously, and some glucose in *aqua distillata* for comparison. Clinically no difference was noted in the two groups. Owing to the small size of the babies and their serious condition, biochemical examinations of the blood were not made. As these Queen Victoria Hospital infants lived longer and required the continuous intravenous administration of fluid for days, the available veins were all used up. The resident staff then decided to give the saline solution by the continuous subcutaneous drip method, using the "Soluvac" flask and hypodermic needles. This proved entirely satisfactory. If one needle is used, the same rate as for intravenous therapy is instituted, the rate being doubled if a Y-piece and two needles, one in each subaxillary region of the chest, are employed. Later, glucose (5%) in saline solution was used subcutaneously. (Glucose (4%) in 1/5 normal saline solution, which is now available, would probably have been better.) The advantages of the subcutaneous drip method over the intravenous route are the much greater technical simplicity and quickness, and the fact that this method prevents overloading of the circulation. The fluid can be clipped off as becomes necessary and started again without the trouble incident in intravenous therapy.

The average time for which the fluid stools persisted was eight and a half days among the premature infants (the limits being two to thirteen days) and five days among the full-time infants (the limits being one to twelve days). After these periods the stools contained fæcal matter and some slime, and took a variable time, sometimes up to some weeks, to become normal. Generally with the cessation of passage of the fluid stools, the infants became convalescent.

The results in this series were much better. Of eight premature infants, two died. Of the two who died, one was a four pound baby of a diabetic mother. The other was a five pound infant who was born outside the hospital and later admitted; its chances may have been prejudiced by the handling and chilling consequent on its journey. Both these infants had a terminal bronchopneumonia. The smallest baby of this series to recover was a premature infant weighing three pounds eight ounces, aged thirteen days, who also developed pyelitis as a complication. Of the twenty full-time babies all recovered.

Effect of Sulphathiazole.

Fourteen infants, two premature and twelve full time, were given sulphathiazole, and fourteen infants, six premature and eight full time, were treated without it. The results were as shown in Table II.

The two series are not strictly comparable, because the "non-sulphathiazole" group contained the majority of the premature infants, and the average duration of the disease was longer and the mortality rate higher among these babies. The clinical impression was that sulphathiazole had no influence on the course of the disease. The greatly improved result in this outbreak was due to the prompt institution of parenteral fluid therapy as soon as the diarrhœa occurred, and the greater care in the rate of administration.

TABLE II.

Infants.	Average Duration of Diarrhœa. (Days.)	Mortality.
Treated with sulphathiazole:		
Premature (2)	4·5	—
Full-time (12)	5	—
No sulphathiazole:		
Premature (6)	9	2 died
Full-time (8)	5	—

In the Women's Hospital II series treatment was governed by the availability of sulphaguanidine and the attempt to forestall dehydration. As soon as the first liquid stool was reported, parenteral administration of fluid was begun subcutaneously or intravenously, and sulphaguanidine was given. The initial period of starvation and the free oral administration of fluids were carried out, and later Nestlé's sweetened condensed milk was given as before. Of the ten premature infants in the group, eight recovered. The smallest infant to recover in this series weighed three pounds ten ounces. Of the two who died, one weighed two pounds fourteen ounces and the other three pounds twelve ounces. In both of these cases for some reason treatment was late in being instituted, and the infants died the next day, being practically moribund when treatment was begun. The one full-time infant, a baby, aged ten days, with fairly severe *icterus gravis*, recovered.

The dosage of sulphaguanidine was as shown in Table III. In the later cases the dosage recommended by Henderson[3] was used, namely: for premature infants an initial dose of one tablet (0·5 gramme), thereafter half a tablet every three hours; for full-time infants an initial dose of one and a half tablets, thereafter one tablet every four hours. This is a larger dose than previously recommended by Marshall *et alii*,[4] but it proved satisfactory, and no toxic symptoms were observed.

TABLE III.

Dosage.	Number of Cases.	Deaths.	Average Duration of Liquid Stools. (Days.)
One tablet, thereafter half a tablet three-hourly	7	—	3·0
Half a tablet, thereafter one-quarter of a tablet three-hourly	3	1	3·5
One-quarter of a tablet, thereafter one-eighth of a tablet three-hourly	1	1	1·0[1]

[1] The infant died; weight, two pounds 14 ounces.

Sulphaguanidine was administered till the number of stools dropped to about three per day and they became normal in type, and for two or three days afterwards. This is a shorter time than recommended by some, but in this series no relapses occurred. As will be seen, the average duration of the illness was three days, as compared with eight and a half days in the Queen Victoria Hospital series "non-sulphaguanidine" group,, and its whole course was changed. Although the mortality among the Queen Victoria Hospital "non-sulphaguanidine" premature infants was only two out of eight, and the mortality in the "sulphaguanidine" series was two out of ten—a not very considerable reduction—the difference in the severity of the illness was remarkable. The Queen Victoria Hospital premature infants were all critically ill, required prolonged parenteral administration of fluid, and caused much anxiety. The sulphaguanidine-treated group never gave cause for serious worry, and their progress was revolutionized. One who has seen infants in the same epidemic treated with and without the drug can have no doubt as

to its efficacy. The complications observed (all in premature infants) comprised bronchopneumonia, pulmonary œdema and pyelitis.

Mortality.

The mortality is summarized in Table IV.

TABLE IV.

Series.	Number of Patients.	Number of Deaths.
Women's Hospital I:		
Full-time	—	—
Premature	11	9
Queen Victoria Hospital:		
Full-time	20	—
Premature	8	2
Women's Hospital II:		
Full-time	1	—
Premature	10	2

The smallest premature infant to recover was thirteen days old and weighed three pounds eight ounces; the child was in the Queen Victoria Hospital series, was not treated with sulphaguanidine, and also had a complicating pyelitis. The mortality rate was affected by the following factors: (i) prematurity (no death occurred among the 21 full-time babies); (ii) the duration of the diarrhœa before treatment was begun; (iii) the control and whenever possible the prevention of dehydration; (iv) the use of sulphaguanidine, which proved life-saving.

Post-Mortem Findings.

Adequate post-mortem examinations were conducted on nine of the infants. Two infants died after two days of diarrhœa; the bowel was found to be normal, as other workers have reported. In one of these babies (a premature infant weighing three pounds two ounces and five days old at the onset) bronchopneumonia was present, and the liver was stated to be slightly pale; but no other abnormality was noted. The other infant was a twin, weighing two pounds nine ounces and also five days old at the onset; in this infant no abnormality other than some atelectasis was found. Another infant was said to have suffered from diarrhœa for one day only, though it had been reported as having diarrhœa four days previously. The duration of diarrhœa is therefore uncertain. This was an infant weighing two pounds fourteen ounces and four weeks old. The small intestine was distended and thin, and the large bowel was distended to a moderate extent. The mesenteric glands were enlarged and pale. The liver was noted to be small, but of normal colour and consistency. In this infant also œdema of the brain and lungs was present, due to the intravenous administration of too much fluid, so that the small size of the liver was the more remarkable.

In each of the six babies who died after three days of diarrhœa, changes were present in the small intestine and mesenteric glands. The changes present in the intestine varied from slight inflammation to more severe grades, in which the mucosa was rose-pink or plum-coloured throughout. In three cases the intestinal contents consisted of thin, blood-stained material.

The two deaths in the Queen Victoria Hospital series both occurred after seven days of diarrhœa, which was the longest duration of diarrhœa in any of the fatal cases. In one case deep pink coloration was found throughout the small intestine which contained pink fluid. No ulceration was present, and the histological findings were inconclusive. In the other infant the small intestine was dilated, thin and congested throughout. Swelling of the Peyer's patches was present, with minute ulcers a quarter of an inch in diameter. The duodenal-jejunal area of the bowel for a length of one and a half inches was very friable and shreddy, and had ruptured, thin fæcal fluid being found in the peritoneal cavity. This may have been due to post-mortem digestion. Microscopic examination of all the villi revealed desquamated epithelium.

The changes in the mesenteric glands varied from slight to gross enlargement, and some were engorged. In the stomach no change other than distension was found in one case, and some pink coloration of its contents was noted in another. Thus the term gastro-enteritis of the newborn, in this epidemic at least, is inaccurate and undesirable.

Abnormal changes in the large intestine were reported in only one case; the subject was the infant who died after seven days of diarrhœa and in whom ulceration of the Peyer's patches was found. In this baby the large intestine was affected by mild catarrhal change. It would therefore appear that the small intestine is the portion of the alimentary tract which suffers in this disease.

The liver is described as small in three out of the nine cases, but unfortunately these livers were not examined microscopically. Two livers were described as tough and yellowish, one as slightly pale. In the two infants who lived for seven days the livers were normal in size, and microscopic examination revealed cloudy swelling.

Bacteriological Findings.

In the Women's Hospital series, Miss Hildred Butler reports that in no cases were recognized pathogenic bacteria isolated from the stools. The aerobic bacteria isolated were as follows: (*a*) *Bacillus coli* and occasionally paracolon bacilli; (*b*) group D streptococci, both hæmolytic and non-hæmolytic; (*c*) other non-hæmolytic streptococci; (*d*) staphylococci (*Staphylococcus aureus* once only). Apart from *Bacillus bifidus*, anaerobic bacilli were infrequent, *Clostridium welchii* especially so. Cultures from the stools of fifty healthy premature babies were found to yield exactly similar bacteria to those in the cases of diarrhœa.

In the Queen Victoria Hospital series, Dr. Phyllis Tewsley found the same results.

Material was taken from the nose and the stools of two infants who had a nasal discharge; but Dr. F. M. Burnet, who kindly consented to examine the material for a possible virus, reported that he could find none. These attempts at culture were made some days after the onset of the diarrhœa, and probably earlier attempts would have been wiser.

Ætiology.

In attempting to elucidate the ætiology of this condition, it must be borne in mind that parenteral diarrhœa is common in various disturbances of infancy. Unless the clinical condition is described in full, together with the appearance of the stools, it is quite likely that many cases of non-specific diarrhœa may be included in this entity of epidemic diarrhœa of the newborn, and may cloud the issue. Thus Craig's[5] description of an outbreak of diarrhœa amongst the newborn suggests a condition of dyspepsia as the preliminary condition, some secondary infection being superimposed. It occurred almost exclusively in bottle-fed infants and did not resemble our outbreak.

Durand[6] reports some cases in which a yeast or monilia was found; but the 23 cases were spread over six months, and this does not indicate a high degree of susceptibility. Moreover, the stools are described as yellow, acid and fermentative, and this description does not fit in with the epidemic under discussion.

Murphy and Mallozzi[7] also describe an epidemic of diarrhœa of the newborn, in which a fungus, probably the *Monilia albicans*, was isolated. These infants passed three to seven loose green stools per day, with mucus and streaks of blood, and the type of diarrhœa was again quite dissimilar from that in the present epidemic.

McClure[8] found that in infants suffering from epidemic diarrhœa there was a greater incidence of hæmolytic colon and paracolon organisms than among healthy infants in the same nursery, and he suggests that these are intimately associated with the disease, though he does not specifically state them to be a cause. The different outbreaks he described varied greatly in type.

Barenberg *et alii*[9] describe an epidemic in which the babies showed a high incidence of upper respiratory infection with *otitis media* and bronchopneumonia, the last-mentioned occurring in ten out of thirteen fatal cases. The

post-mortem findings in the alimentary tract were different from ours. The intestine was normal throughout, except in five cases, in which some hyperæmic mucosal spots were present. The stools in Barenberg's epidemic also appear to be different from ours, being described as loose, fermentative, with slight mucus and curds. These workers were unable to isolate any causative organisms, and concluded that the epidemic was probably due to an air-borne virus.

Rice *et alii*[7] were also unable to find either a bacterium or a virus. The clinical features of their epidemic were exactly similar to ours, and the description of the characteristic stool is identical.

Campbell and Cunningham[10] point out that in infancy, when the digestive processes are unstable, there appears to be a close relationship between parenteral infections and disturbed alimentary function. The upper part of the small intestine does not normally contain coliform organisms; but if parenteral infection occurs, with disturbed intestinal function, the colon bacillus may invade these upper reaches of the intestine and there become pathogenic (paracolon bacillus), producing a secondary enteritis.

About the time of the epidemics of diarrhœa among the newborn in these nurseries, the adult population of Melbourne was experiencing an outbreak of "gastric 'flu" with severe diarrhœa, abdominal pain and prostration, and accompanied by bodily aching and nausea; it is possible that the two were related.

Reference has been made to the presence of nasal discharge in some of the infants, and it is unfortunate that we did not take nasal swabbings at the onset. At that time attention was being concentrated on the idea that the disorder was a primary bowel infection. In the outbreak described by Barenberg *et alii*,[9] the affection of the respiratory system was more pronounced; the *otitis media* occurred frequently at the onset, and ten out of the thirteen autopsies revealed bronchopneumonia. I have been unable to ascertain the exact number of infants showing nasal discharge in our series. Two out of the eight in the Queen Victoria Hospital outbreak had a pronounced frothy nasal discharge, and "some" of the Women's Hospital I series. There were only three cases in our series of nine autopsies in which bronchopneumonia was found.

Recently some interesting and suggestive work has been carried out by Light and Hodes,[11] who produced diarrhœa in young calves by the nasal instillation of unfiltered and filtered material from the stools of infants suffering from an outbreak of epidemic diarrhœa of the newborn. Unfortunately no clinical description is given of the type of diarrhœa occurring in the babies. Diarrhœa was also produced in the calves by introduction of the material into the stomach through a stomach tube. Moreover, in two cases the disease was produced by the use of blood from infected calves at the height of the illness; in one case the blood was given intranasally, in the other subcutaneously. At the post-mortem examination of the calves which died, hyperæmia of both the small and large bowel was found, with swelling of the lymphoid tissue and Peyer's patches, and in one severe case ulceration of the mucosa. Control experiments with material from the stools of normal infants gave negative results. All attempts at culture were unsuccessful, and the agent required to be boiled for ten minutes to render it inactive. The authors suggest that this agent may be a cause of epidemic diarrhœa of the newborn. The instance in which the disease was produced by subcutaneous injection of blood from a patient is of interest, as indicating a systemic rather than a purely alimentary infection. So far this work has not been confirmed.

The rapid and dramatic response to sulphaguanidine would indicate that an infective enteritis was present, and in all fatal cases when the diarrhœa had lasted three days or longer, the small intestine was found to be inflamed, the changes being more pronounced the longer the duration of the diarrhœa.

Campbell and Cunningham's hypothesis[10] can be used to explain the post-mortem findings. As a result of parenteral infection (presumably an upper respiratory infection) to which adults and older children are resistant, and to which premature and puny full-time babies are particularly susceptible, the intestinal functions become deranged, with the production of a parenteral type of diarrhœa. Thus in the first two days of the illness no anatomical changes are found in the intestine, the disturbance being functional. The normal bacterial content of the bowel then invades the upper part of the small intestine, developing pathogenic properties and producing secondary enteritis. At the present time it would appear, therefore, that the cause of the disease has not yet been elucidated.

Mode of Spread.

Since the causative organism has not been isolated, the mode of spread is largely a matter of conjecture. The disease occurred mostly in completely breast-fed infants (32 out of 50). The most scrupulous care in the technique of feeding, feeding utensils, preparation of food, disposal of soiled napkins *et cetera* failed to check the spread of the disease. None of the mothers of the twenty full-time breast-fed infants at the Queen Victoria Hospital had diarrhœa, nor were we able to find any instance of gastro-intestinal disturbance among the nurses attending any of the infants except in the Women's Hospital I series, where one of the nurses gave a vague history of gastric disturbance some days previously. It is, of course, possible that we should have been searching for symptoms of upper respiratory infection in the adult contacts, rather than for gastro-intestinal symptoms. The clinical impression was that the disease was air-borne and not transmitted by the food and feeding utensils.

Method of Control.

In America the procedure recommended is to close the nursery and to suspend the maternity service. All patients and contacts are observed for three weeks before being sent home, and in New York City all cases of diarrhœa among the newborn up to the age of three weeks in maternity hospitals must be notified. Such methods were, of course, impracticable in view of our bed situation, and our procedure was to maintain three nurseries with separate staffs: (i) the isolation ward, into which all babies suffering from diarrhœa were placed; (ii) the original nursery, where the infants present at the outbreak were kept till their discharge from hospital; we allowed them to be discharged at the usual time, and as far as we could ascertain, no harm resulted; (iii) the "clean" nursery, in which all babies born subsequent to the outbreak were placed. The Women's Hospital I outbreak was short-lived, owing to the fact that the babies in the premature ward were practically wiped out in a few days, there being only two survivors out of eleven. The duration of incidence of cases is uncertain, but is taken roughly as extending over four days. In the Queen Victoria Hospital series cases occurred over a period of nineteen days, and in the Women's Hospital II series over a period of twenty-four days, before the spread was controlled.

The making of this disease notifiable would be a safeguard to the newborn infant, provided that the typical character of the stool was appreciated. Unless this type of stool is recognized, the reporting of all cases in which loose stools were passed would create an impossible situation.

Conclusion.

It was thought that the outbreak provided some useful lessons, of which the first was the necessity to be on one's guard for the first case of such an epidemic. The explosive rapidity with which it spread, particularly among premature infants, was a most sobering spectacle. The recognition of a characteristic stool is easy; the stool is a true fluid, like yellow water with no solid constituents; it is quite different from the usual loose stool occurring when the colon (as opposed to the small intestine) is irritated, with the production of the ordinary diarrhœal stool containing mucus and curds.

As has already been pointed out, the reduction in the Queen Victoria Hospital mortality rate among premature babies, as contrasted with the Women's Hospital I epidemic, was due to the early recognition of the disease

and the earlier treatment, particularly the prompt institution of parenteral therapy. We also learned to be more careful of the rate of intravenous flow of fluid, otherwise the treatment was the same in the two series.

This outbreak also gave an opportunity to contrast the severity of the disease in premature infants with its milder course and absence of mortality among the full-time children. The Women's Hospital II outbreak enabled us to evaluate the efficacy of sulphaguanidine. There can be no doubt that in this drug we have a means of controlling this disease.

While the outbreak reported is the most severe to my knowledge in Melbourne, other lesser epidemics have occurred. It is hoped that by attracting attention to the condition, early recognition and isolation will prevent spread of the disease. It was thought also that the successful results of sulphaguanidine therapy and adequate hydration should be recorded.

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Reviews.

ELEMENTARY PRACTICAL CHEMISTRY.

THE appearance of the seventh edition of "Salts and Their Reactions: A Class-Book of Practical Chemistry", by Dobbin and Mackenzie, is mute evidence of the continued popularity of this introductory book on practical chemistry.[1] The large number of teachers who believe that the best approach to elementary chemistry is through the reactions of simple salts, acids and bases, will find in this book their ideal.

This edition (1944) follows eight years after the last, from which it differs in very little but the preface. The clear set-up so characteristic of previous editions has been retained throughout, but, as in most books published in England today, the standard of paper has declined.

The first section of some 47 pages deals with the physico-chemical properties of solutions in an elementary way, the theory of ionization being given particular attention. Unfortunately, an otherwise excellent treatment is marred by the retention of concepts which are no longer tenable; in fact, for students who go very far in chemistry, some will have to be corrected. Following the introduction of the idea of "non-ionised molecules of salt (sodium chloride)" on page 25, the authors continue to make use of this no longer accepted idea in later arguments. Again, although an advanced treatment of the common ion effect is not called for in an elementary text-book on practical chemistry, the use of an outmoded approach when a simple, correct explanation is available is to be regretted.

The sections that follow are concerned in order with "General Methods of Preparing Salts", "Experiments on Salt Formation", "Reactions of Salts" (98 pages dealing with qualitative tests for basic and acid radicles in the dry and wet way) and "Volumetric Analysis". The first appendix deals with "Some Common Organic Substances", whilst the second gives valuable information on the preparation of reagents. The sections devoted to salt formation form a particularly good introduction to the qualitative tests which follow. This next section, really the core of the book, deals with the reactions of salts in detail, all the reactions of the common metals and acid radicles being given. In their treatment, the authors have wisely kept in mind throughout that this course is intended to ensure that ". . . the individual student may become practically acquainted with the properties of the metals, oxides, hydroxides, acidic and metallic radicles, upon which his general chemical knowledge is based . . .". For this reason, presumably, many of the modern specific reagents for metals have been omitted, for with many of the organic reagents now available a student can identify a metal very readily without learning any chemistry in the process.

The section on volumetric analysis covers 25 pages, and although brief, includes all that one might reasonably expect a first year student to do. The appendix on organic substances contains a description of a few organic reactions with common substances; it does not aim at being systematic or complete, but serves the useful purpose of introducing the student to the difference between inorganic and organic reactions in general.

This book can be thoroughly recommended to all institutions as an excellent first year practical book, the criticism made being of small weaknesses which are noticeable chiefly because they occur in an otherwise outstanding introductory practical text-book.

DISEASES OF THE CHEST.

A NEW treatise of "Diseases of the Chest" by Dr. Robert Coope, of Liverpool, England, owes very little to any of its predecessors in the same crowded field, and, indeed, gives a *congé* to many concepts which have been copied from book to book from generation to generation.[1] "Krönig's bands, Traube's space, Grocco's and Garland's triangles and Wintrich's and Gerhardt's change of tone", it is stated, "are all signs which should now be considered as of interest only to medical historians. Examiners might well agree to superannuate them and so preserve their own and their students' sense of proportion." Likewise it is stated that the S-shaped line of Ellis "might now be retired from active service". The section of the book devoted to the symptoms and physical signs of thoracic disease contains much applied anatomy and physiology and is very clear and good. Individual diseases of the chest are dealt with in a logical and very practical way as regards natural history, investigation and treatment; the bronchial diseases are especially well done. The section on hydatid disease is open to the criticism that the author appears over-reliant on the laboratory diagnosis and is too forthright in his advice of early operation where possible. The order of the chapters of the book is curious and does not seem to be in accordance with any system. The author's style is robust, often informal or colloquial and quite easy to read; very occasionally the style becomes flowery—perhaps "aspidistery" were a better word—as when he writes of the old masters of medicine. The book may be safely recommended to the student and practitioner to read and keep as a work of reference.

[1] "Salts and Their Reactions: A Class-Book of Practical Chemistry", by Leonard Dobbin, Ph.D., and John E. Mackenzie, O.B.E., D.Sc.; Seventh Edition; 1944. 8½" × 5½", pp. 253. Price: 8s. 6d. net.

[1] "Diseases of the Chest, Described for Students and Practitioners", by Robert Coope, M.D., B.Sc., F.R.C.P., with a foreword by Lord Horder; 1944. Edinburgh: E. and S. Livingstone. 8½" × 5½", with illustrations, some in colour. Price: 25s. net.

The Medical Journal of Australia

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THE WHITE RACE IN THE TROPICS.

THE problem of the white race in the tropics has assumed a more acute phase as a result of war operations. The United States of America lie outside the extreme limits of what was once called the torrid zone, and a powerful civilization has grown up in an extensive territory under temperate climatic conditions. Now, however, American soldiers, engineers and administrators are working in sweltering jungles of a type unknown to them previously, and American medical men who were justly proud of the great schools where they received their training have discovered that there is a wide domain of pathology, diagnosis and treatment in which they have no practical experience and but little systematic knowledge. American statesmen, too, are taking a long-range view of their responsibilities in the Pacific, especially in those regions north of Capricorn and south of Cancer after the subjugation of Japan. In fact Americans have suddenly became tropic-minded. Economic possibilities which always appeal to the astute American loom large today. Solar energy with the requisite water allows a far greater return for human labour than in extra-tropical lands. According to General William Gorgas: "When the great valleys of the Amazon and Congo are occupied by a white population more food will be produced in these regions than in all the rest of the world." America, which consumed 75% of the world's rubber, has had to fall back on the laboratory for a substitute, so far, inferior to the natural. Vegetable oils, cacao, coffee, spice, quinine and ipecac are tropical products which Americans would dearly like to produce and exploit. The awkward fact, however, stares America in the face that the most productive areas of the tropics are the most unhealthy, and conversely the most healthy are the least inviting from the economic standpoint.

Australians have also gained experience of life in hot, humid conditions which only a very few citizens of the Commonwealth had hitherto encountered, and so once more the question is asked, and with ever-growing emphasis, whether the white race can live in the tropics without degeneration. When it was first demonstrated that the appalling death rate and the high incidence of anæmias and of physical and mental deterioration could be ascribed to infectious, and therefore ultimately preventible, diseases, the hope sprang into being that if pathological causes could be excluded the physiological might turn out to be small or even imaginary. A wonderfully unique opportunity was given to Australia to take the lead in the investigation of this problem, for in the tropical parts of the Commonwealth endemic diseases are few, there is no large native population to act as a pathological reservoir, and the whole activities of each community are carried out by whites without coolie labour. That Australia, apart from some investigations carried out in the Department of Physiology of the Queensland University, has fallen behind in this immensely important work is a matter for deep regret. Following upon the period of hopefulness that the tropics might be emancipated from those dread diseases which have taken such heavy toll of life and health, a hopefulness which was awakened or kept alive by the spectacular triumphs of preventive medicine in the Panama Canal zone and in certain Federated Malay States, there came the measured opinion of many medical assessors who restricted their attention to the physiological and psychological, and their opinion was not optimistic. Sir Andrew Balfour, late director of the London School of Tropical Medicine and Hygiene, declared that the tropics are "not suited to white colonization and never will be with our present knowledge even if they were rendered as free from disease as England". Castellani, who was long regarded as a tropical optimist, joined the ranks of the doubtful, and Huntington, the American expert on climatology, also predicted ultimate loss of vigour in the white race.

This problem with its immense political, economic and social involvements has recently been subjected to a dispassionate analysis by an American authority, Dr. Ludwik Anigstein.[1] "Just as military operations are now being displayed largely in the tropics, we may anticipate that the latter will also be included into the sphere of the future reconstruction. Colonization of the tropics will be attempted again largely for reasons of strategic security and economic exploitation of the legendary unlimited resources. This potential wealth of the tropics will be even of greater temptation to a starving world than in the early history of colonization." Dr. Anigstein in a judical summing up is unfavourably disposed towards the chances of white colonization in the tropics generally, but he singles out Australia as the one region where success may be possible. "On the basis of our modern knowledge and observation it seems that with the possible exception of tropical Australia there is so far no evidence of a successful existence of the white race in the tropics from generation to generation." That Australia is thus favoured by having tropics free from a large coloured population and but little afflicted with disease, and for some unexplained reason with a remarkably low incidence of sunstroke or heatstroke, is a tremendous asset which we have not appreciated as we should, nor have we realized that the northern half of the Commonwealth might become a vast sanatorium for white people suffering from respiratory and arthritic diseases. Some malaria and other tropical complaints are certain to be introduced from the

[1] Ludwik Anigstein: "The White Race in the Tropics: A Post-War Problem", *Texas Reports on Biology and Medicine*, Volume II, Number 2, Summer, 1944, page 141.

theatre of war, but these can be easily stamped out, thanks to the hygienic instincts and traditions of our race. One of Dr. Anigstein's measured conclusions is as follows: "On the other hand by careful and scientific selection of suitable and scarcely [*sic*] populated areas such as the immense regions of Northwest and Northeast Australia a voluntary settlement of certain European groups could be initiated. Should this question arise within the reconstruction scheme of the United Nations and the plan assume large proportions it would then seem most logical for the future United Nations Health Service to take over the leadership and share the responsibility for all health problems concerned." Let our statesmen ponder over this announcement, for it means that if Australia cannot meet her scientific and hygienic obligations connected with her tropical territories, other countries will demand that they be given the task.

Current Comment.

MEDICINE IN ANCIENT MESOPOTAMIA.

RESEARCH into ancient cultures never fails to produce genuine admiration for the achievements of civilizations which lacked the aids that are commonplaces in our own. For instance, in his study of medicine among the peoples of ancient Mesopotamia, André Brunel makes some comments on the calendar.[1] Not the least striking of these is the fact that, about 500 years B.C., the Chaldean astronomer Nabu-rimannu calculated the length of a year as 365 days, 6 hours, 15 minutes and 41 seconds; this period, estimated 2,000 years before the invention of the telescope, was 26 minutes, 55 seconds too long.

The civilization of the Sumerians, the oldest and the most important of western Asia, was at its zenith 3,000 years B.C. Their medicine, animistic and sacerdotal, was based on astrology, and prognosis and treatment depended upon the guidance of the stars. The centre of Sumerian civilization was the temple, and the king, who was also the high priest and the chief of the magicians, was from that fact the grand master of the doctors. Treatment was based on physical and spiritual hygiene. Water and fire were the chief purifying agents. Mesopotamia was conquered by the Accadians 2,500 years B.C., but Sumerian culture survived and remained the foundation of Assyro-Babylonian civilization. Clay tablets from the library of King Assur-bani-pal of Assyria and the code of King Hammurabi of Babylon, at present in the Louvre, are remarkable documents from the medical point of view. From the seals of one or two great physicians we learn that certain doctors were appointed to positions of importance in the State. Moreover, the letters of the most famous doctors of the Assyrian court are available; from them we learn of their medical doctrines. Their medicine, like Sumerian medicine, was sacerdotal, and was practised by doctor-priests. The legends all point to the Assyrians' symbolic attitude to life and to their constant preoccupation with immortality. According to their belief, man was the son of the god who gave him life. Thus, if a man fell ill, he had to call upon one of the creator gods and ask of him deliverance from his trouble and purification from past sins (for illness was always the result of sin or impurity). Brought about by one of the countless demons and malign spirits that haunted the imagination, or by an evil spell cast by a sorcerer, the sickness had to be combated by natural and magic means. The doctor's task, as soon as he was called to the patient, was to discover the causes of the illness. He inquired into past misdemeanours, into the patient's thoughts, into his fears of being possessed. The doctor then decided upon the nature and extent of the "demon-illness". (Brunel calls attention to the fact that this method of procedure embodies the great Hippocratic principles of interrogation and of observation of symptoms, as the basis of diagnosis and prognosis.) If the doctor was unable to solve the mystery of the illness, recourse was had to divination. Examination of the stars, the interpretation of dreams and the offering of sacrifices, were carried out with scrupulous attention to ritual and in accordance with tradition. When a sacrifice was offered, the organs were examined; the first thing noted was the state of the liver, which is believed by all oriental peoples to be the vital organ, and which the Chaldeans held to be the seat of the soul. Another type of investigation was the pouring of oil on water and noting of the various patterns that it made. Observation of the flight of birds was also frequently employed; but sometimes the cause of the patient's trouble could not be discovered, even when all these methods had been tried.

When a diagnosis was made, treatment consisted first of all in reconciling the patient with his god, and then the "demon-illness" could be driven out. Prayers and invocations to the angry gods were followed by certain purifying rites and by expiatory sacrifices, a kid or a lamb being offered. The patient was sprinkled with fresh water—"washed of his sins"—and the illness was destroyed by magic forces, as fire burns and purifies a handful of grains of wheat. Then at last, good health, evidence of a blameless life and of the presence of his god in the man, was once more restored. He who obeyed the divine law and led a life free from sin should remain in health and live long.

When we read of the days of magic and priestly medicine, we do well to remember, as Castiglioni has shown in his "History of Medicine", that an instinctive and empirical medicine probably preceded magic and priestly medicine, "but flourished along with them, sometimes relying on the power of men invested with supernatural gifts, sometimes growing in the shadow of mysticism". Castiglioni then continues: "However this may be, when we study the history of religion—which is closely connected with the history of medicine, as religion and medicine strive essentially for the same end, the defence of the individual against evil—we note that as soon as religions began to take definite form, medicine changed from its first faltering footsteps and from daily contact with nature to enter the sanctuaries, which became for many centuries both its temples and its schools."

[1] *Revue médicale française du Moyen-Orient*, April, 1944.

DENTAL CARIES.

ONE of the penalties of civilization is dental caries. The treatment of the active process has not been really satisfactory inasmuch as it has not been successful in reducing its incidence, and as yet prevention cannot be said to be a solved problem. Marguerite Malherbe and T. Ockerse, working in the Department of Public Health in South Africa, have taken the opportunities offered in that country and have contrasted the findings of surveys carried out in different areas.[1] Dental surveys had revealed that in certain areas the incidence of caries was extraordinarily high, up to 100%, while in other areas the figure reached only 10%. These figures refer only to European school children, so the factor of racial variation is thereby reduced. Malherbe and Ockerse remark that this extreme variation has been noted in other countries, where theories of all kinds have been advanced. The factors most usually considered as significant in causing caries are diet, infection, lack of calcium in water, soil or food, and lack of fluorine in the water. In the present instance these authors contrast the conditions in the George area, where the incidence is very high, with those found in the Williston area, where the incidence is relatively low. The percentages of dental caries found in large numbers of children in these areas were 97 and 40 respectively. No radiological surveys were possible, so it may be that the figures should really be somewhat higher.

Heights and weights of the children were also observed. Teeth extracted locally from the children examined were

[1] *The South African Journal of Medical Sciences*, August, 1944.

analysed for mineral content, and enamel and dentine were separately examined. Local water supplies were also analysed and the dietaries of the various districts were studied. Samples of the locally grown foods available at the time were analysed. In addition data were collected concerning the soil, soil analysis, climate, including hours of sunshine, temperatures, rainfall and altitude. From previous observations on hours of sunshine and ultra-violet refraction figures it was concluded that the latter were lower in the George area, where caries was of high incidence. In this district most of the people had become edentulous before the age of fifteen years. It is interesting that no cases of mottled enamel were seen, a fact no doubt related to the low fluorine content found on analysis of the teeth extracted in the district, and also of the local water supplies. No significant differences were observed in the calcium, magnesium and phosphorus content of the teeth of the two districts studied, but the water in the area of high incidence was much softer, that is, contained less calcium carbonate. However, the authors point out that the amount of calcium ingested and utilized in drinking water is no doubt very small and probably not appreciable unless the water is very hard. This condition was actually fulfilled in the Williston area, where the calcium content was remarkably high, while the caries incidence was low. In the matter of diet, the George area was distinguished by the infrequent use of eggs, fish, meat and cheese, and to some extent milk also, while the carbohydrate intake was large. In the Williston area meat and wholemeal bread were freely available. It is pointed out that exercise of the jaws is important and is not encouraged by soft foods. Food analyses showed that calcium and phosphorus levels were low in the George area, but figures for the other area were inconclusive.

Finally these researches show that in an area where dental caries is of high incidence the diet tended to be low in first-class protein, fat, calcium and the important vitamins. Calcium and phosphorus were found in small quantities only in the locally grown food, and the drinking water was softer than in the contrasted area. The water was notably deficient in fluorine also, and the fluorine content of the enamel and dentine of the teeth was lower than in the other area. It is of interest to note here that some medical and dental officers in Palestine with the Australian Imperial Force used to remark that the Arab children in certain villages had better teeth than the average, and that their enamel was noticeably mottled, no doubt owing to the presence of fluorine.

Malherbe and Ockerse also point out the probable relationship between solar radiation, vitamin *D* and calcification, and indirectly the possible incidence of dental caries. This interesting survey indicates the magnitude of the problem of dental caries and the diversity of factors that may be responsible. Certainly here is a subject worthy of the expenditure of money, energy and brains.

THE DIAGNOSIS OF HÆMORRHAGE IN MAN.

PERHAPS it might be thought that hæmorrhage is one of the self-obvious conditions, but it is not always so. For one thing any estimation of the amount of a bleeding if not proven by measurement is frequently only a guess, being subject to natural exaggeration by the patient. "A little blood makes a big show", as a famous Australian surgeon used to say. In addition to this fallacy bleeding may occur quite unknown to the patient, even when it is external, either during a period of unconsciousness or as melena. The pallid patient with a recent history of dyspepsia, often strangely relieved after a queer attack of dizziness or fainting, is a case in point. It is rather surprising to read that the diagnostic value of a rapid pulse and a low blood pressure is a concept widely accepted. H. A. Shenkin, R. H. Cheney, S. R. Govons, J. D. Hardy, A. G. Fletcher and Isaac Starr in some recently published work[1] on the diagnosis of hæmorrhage in man apparently felt some diffidence in upsetting a generally accepted opinion that tachycardia and low blood pressure are constant findings after bleeding. But surely this opinion is not now widely held, for it is common to see patients soon after substantial blood loss with an actual bradycardia, and after a short lapse of time without any substantial disturbance of heart rate or blood pressure. However, this team has made some accurate observations under ideal conditions, and their findings should correct prevalent errors on the subject. Their attention was first directed to this study by observations of other workers on the blood lost in major neurosurgical operations. Though amounts up to one or two litres were lost, some of the patients showed none of the expected signs. Therefore this team of workers studied the effects of blood loss in blood donors, and even supplemented their studies with observations on some of themselves after being voluntarily bled till serious symptoms appeared. The amount withdrawn was 500 cubic centimetres in a series of eighteen healthy subjects. From seventeen other subjects one litre was drawn, and in a few cases this amount was somewhat exceeded. The time occupied by the bleeding was four to eight minutes in a few cases, but about fifteen minutes in the majority. Due notice was taken of the psychological effects of bleeding, and observations were made before and after the bleeding, during the recovery period, and, in a few cases when the lost blood volume had been made good by blood or a substitute. Heart rate, blood pressure, cardiac output, measured by the ballistocardiograph, blood cell count, and any significant symptoms and signs were observed. Using this material, Shenkin and his associates have divided the abnormalities encountered after bleeding into three stages. In the first stage the patient has no symptoms either recumbent or standing at rest. But as soon as he rises the pulse rate quickens and the blood pressure falls. He can go about his usual affairs, but he feels weak and may notice dyspnœa on exertion. Following a larger hæmorrhage the disturbance is greater. The subject is still free of symptoms while at rest and recumbent, but as soon as he sits or stands upright he is seized by immediate faintness, often going on to syncope and accompanied by bradycardia. The writers cannot completely explain the mechanism of these attacks, which suggest a parasympathetic or so-called vaso-vagal origin. They can in these experiments dissociate an emotional origin, and it is significant that they observed a definite association between the amount of blood withdrawn and the occurrence of syncope. They quote the interesting finding of Poles and Boycott, who noted that the incidence of syncope in donors bled 540 cubic centimetres was double that of donors bled 400 cubic centimetres. Cerebral anæmia seems to be a more likely cause than the mediation of the carotid sinus mechanism. Certainly the cardiac output of these subjects was greatly lowered during the attacks. The exact cause of the bradycardia cannot be determined by the data in this study.

The third state of post-hæmorrhagic changes is reached when the subject suffers from symptoms while recumbent. Lowered blood pressure, a very slow pulse rate, pallor, sweating, hyperpnœa and restlessness are observed, and the subject feels cold, nauseated and faint or dizzy and may lose consciousness. During spontaneous recovery the subject passes through these stages in reverse order.

It is emphasized that the question of injury or shock associated with injury does not come into the picture in this series of observations, which concern solely the effects of uncomplicated loss of blood. This is a valuable piece of work and should clarify our ideas about the results of bleeding. Observant clinicians will reinforce with their own experience the findings of this team that recumbent subjects may be bled to the point of collapse without exhibiting conspicuous tachycardia. It is of additional interest that the blood pressure may under such conditions remain within normal range until actual collapse occurs, when, of course, it suffers a rapid and substantial fall. Though it may seem obvious that circulatory disturbances made manifest by rising from the recumbent position may be due to recent blood loss, it must be admitted in all humility that even the obvious things may be overlooked.

[1] *The American Journal of the Medical Sciences*, October, 1944.

Abstracts from Medical Literature.

SURGERY.

Heroic Treatment of Bleeding Subclavian Vein.

R. A. S. CORY (*The Journal of Thoracic Surgery*, February, 1944) reports that while performing internal pneumonolysis with a thoracoscope, the cautery sank into the left subclavian vein (which was distorted from its normal course) and there was an enormous gush of blood. No instruments for thoracotomy were at hand and there was obviously no time to induce anæsthesia. So he seized a scalpel, turned the patient onto his back, and with two strokes cut open his chest in the fourth intercostal space from the axillary line to within an inch of the sternum. Surgical dressing towels were then stuffed into the apex of the pleural cavity. The hæmorrhage was controlled. Definitive treatment was undertaken later. The patient recovered.

Parathyreoid Tumours.

H. B. ALEXANDER and three co-workers at the Mayo Clinic (*The American Journal of Surgery*, August, 1944) provide an account of the historical, clinical and pathological aspects of tumours of the parathyreoid gland. In 1904, Askanazy described a case of bone disease occurring in association with a parathyreoid tumour, but he thought that the bone disease was *osteitis deformans*. In 1915, Schlagenhaufer described the post-mortem findings in two cases of generalized *osteitis fibrosa cystica* which were associated with parathyreoid tumours. It was not until 1926 that Mandl, of Vienna, removed a parathyreoid tumour in such a case with clinical improvement. Since then the disease has been widely studied. Patients with parathyreoid tumours show a variety of symptom complexes. Generally they may be divided into those whose main symptoms are of the bone disease, those who show changes in the urinary tract, and those who are seen with acute, often fatal hyperparathyreoidism, which has usually supervened on a more chronic type of the disease. The disease appears to be about three times more common in women than in men. General symptoms include weakness and fatigability, loss of weight and digestive disturbances. The bone changes give rise to pains, often in the back or lower extremities, loss of height, kyphosis and, often, spontaneous fractures. In the cases affecting the renal tracts, symptoms of nephrolithiasis may first cause trouble, and bony changes leading to a more complete diagnosis may not appear for several years after the renal stones are recognized. A raised blood calcium and a lowered blood phosphorus content are usually seen, but estimations of calcium may occasionally yield figures which are practically normal. In such cases, repeated estimations will sometimes show a greater deviation from normal. The authors supply histories of fourteen patients suffering from parathyreoid tumours recorded at the Mayo Clinic up to November, 1942. Operative and pathological details are given. The size of the tumour appeared to have no influence on the severity of the disease. The tumours were usually brown and encapsulated, though in four cases there was evidence of invasion of the capsule by the tumour cells. In thirteen of the fourteen cases, the tumour showed cytological evidence of malignancy. This finding is in contrast to the experience of other writers who consider that malignant change is very rare in these tumours. In none of the present series was metastasis or local recurrence noted. The situation of the tumours was varied. In one case, the tumour was within the thyreoid gland. In the others the tumour lay outside the capsule, in four cases being in the mediastinum. In most instances tetany was a troublesome complication in the post-operative period, but in only one patient did persistent tetany occur.

The Endocrine Treatment of Carcinomata of the Prostate Gland.

A. L. DEAN, H. Q. WOODARD AND G. H. TWOMBLY (*Surgery*, August, 1944) present the results of clinical and other investigations on the effects of the endocrine treatment of carcinomata of the prostate gland. About 100 patients with carcinoma of the prostate were treated either by castration or by stilbœstrol given in daily doses of one to five milligrammes by mouth. Both forms of treatment caused a striking clinical improvement, at least temporarily. The benefits after castration were more prompt, but less lasting, than with stilbœstrol. The authors conclude that the two methods of treatment act in different ways, but when relapse had occurred after one method, institution of the other was without effect. Castration appeared to have no effect on the primary lesion and on the amount of residual urine, while stilbœstrol showed a definite beneficial influence. Serum phosphatase determinations were made, and proved useful for diagnosis and for following the progress of the disease. The serum acid phosphatase level falls promptly in patients who respond favourably to castration, and rises again with return of cancerous activity. The same changes occur more slowly in patients treated with stilbœstrol.

Treatment of Varicose Veins by Diathermy.

ROGER ABBEY SMITH (*The Lancet*, July 29, 1944) describes a method by which the obliteration of varicose veins can be brought about by the application of a diathermy current to the intima of the vessels. A spherical electrode, one-twelfth of an inch in diameter, is mounted on a flexible insulated rod about three feet long. The vein is exposed and cut and the electrode is passed along to its extremity; the diathermy current is then applied as the electrode is withdrawn at a steady rate. If thrombosis is not satisfactory, the treatment is supplemented by local injections of "Ethamolin". Among advantages claimed for the method are that results are good, while pain and reaction are less than with the retrograde injection of sclerosing agents. Disadvantages include the need for special apparatus, a general anæsthetic and a stay in hospital of four to seven days. Further the method is limited in its application to those cases in which the electrode can be coaxed along to the extremities of the affected veins.

Calcium Changes in Acute Pancreatitis.

H. A. EDMONDSON AND C. J. BERNE (*Surgery, Gynecology and Obstetrics*, September, 1944) set out to investigate the calcium disturbance accompanying acute pancreatitis. The fatty necrosis characteristic of this condition is due to the action of pancreatic lipase splitting fat into fatty acids and glycerol. The latter is absorbed without recognizable effect, but the fatty acids take up calcium and possibly magnesium to form insoluble soaps. The authors point out that the dislocation of large amounts of calcium from the blood stream may be expected to cause systemic effects. The total calcium in the circulating blood is only about 650 to 700 milligrammes, and it is probable that mobilization of calcium from the reservoirs in bone and tissue fluids would be delayed in shock states. The authors studied a series of cases, including six with fatal outcome. In the fatal cases estimations were made of the amounts of calcium deposited in and about the pancreas. Ante-mortem studies of blood calcium were carried out on patients in respect of whom a clinical diagnosis of pancreatitis had been made. In the six fatal cases there were from 100 to 1,732 milligrammes of calcium in areas of fat necrosis. Serum calcium figures below nine milligrammes per 100 cubic centimetres of blood were present in 36 of 50 patients with pancreatitis at some time between the second and fifteenth days of the disease. The average serum calcium level was lowest on the sixth day of the disease (8·4 milligrammes), and returned only slowly to normal in severe cases, lagging behind the clinical progress of the disease. The authors conclude that serum calcium concentration figures below 7·0 milligrammes per 100 cubic centimetres of serum indicate a fatal prognosis.

Ligation of Patent Ductus Arteriosus.

O. S. TUBBS (*The British Journal of Surgery*, July, 1944) gives an account of the anatomical and physiological features of patent *ductus arteriosus*, with details of the operative technique employed in its treatment. The main purpose of the communication is to report nine cases in which ligation was performed for an infected ductus. The ductus is a normal channel connecting the pulmonary artery at its bifurcation with the aorta just distal to the origin of the left subclavian artery, and functioning as a by-pass valve during fœtal life when a pulmonary circulation is not necessary. It probably ceases to function as such within a few minutes of birth, and becomes anatomically closed by cicatrization in about a month of birth. If it remains patent, a rapid stream of blood passes from the aorta, the vessel of higher pressure, into the pulmonary artery. The right side of the heart hypertrophies in order to pump blood against this raised pressure, and the left side of the heart also hypertrophies, as its output has to be increased to compensate for the diversion of part of the aortic stream into the pulmonary circulation. The raised pulmonary pressure may lead to atherosclerosis of the ductus and

pulmonary artery. Infection of the endothelial lining is liable to occur. The patent ductus averages about 1·5 centimetres in length and 1·0 centimetre in diameter. But it may occur as a "window" opening with no length at all and resembling a gastro-enterostomy stoma. When infection occurs, it usually begins in the pulmonary end of the duct, but may later spread to the pulmonary artery and to the aorta. However, the pulmonary embolic phenomena usually precede the systemic. The prognosis after infection has been almost invariably fatal, the duration of life being from one month to two years. Only two cases have been reported in which recovery has taken place without operation, and in one of these infection subsequently recurred. In 1939, Gross, of Boston, performed the first successful ligation of a patent ductus, and sixteen months later, the author and two colleagues performed in England the first successful ligation of an infected ductus. The author reports nine cases, complicated by infection, in which surgical ligation was performed. Six of the patients are now alive and well at periods of from fifteen months to over four years after operation. Such results, compared with the almost inevitably fatal result of non-intervention, indicate that infection of a patent ductus must be considered an absolute and urgent indication for operation. But the diagnosis must be made early. Any patient with a patent ductus who has an unexplained rise of temperature for more than two weeks should be suspected of having this complication.

Synergic Action of Penicillin and Sulphonamides.

J. W. BIGGER (*The Lancet*, July 29, 1944) has investigated the effects of a combination of a sulphonamide with penicillin. The experiments were carried out *in vitro*. The author refers to Ungar's work carried out with sulphapyridine which showed that the inhibitory effect of penicillin on staphylococci and streptococci was at least doubled by a concentration of sulphapyridine which alone was insufficient to show any effect on the organisms. Bigger found that sulphathiazole in broth greatly increases the dilution at which the inhibition effect of penicillin on staphylococci can be demonstrated. In this respect sulphathiazole is superior to sulphapyridine and sulphanilamide. It is considered that the experiments suggest that penicillin used clinically should be supplemented by sulphathiazole to enhance its action and to assist in tiding the patient over the period when the blood concentration falls between doses of penicillin. Further, in the present shortage of penicillin, the simultaneous administration of sulphathiazole should permit some saving in penicillin dosage.

Arterio-venous Fistula.

IT was formerly thought that an artero-venous aneurysm, once formed, could not undergo spontaneous cure. R. F. Barber and J. L. Madden (*Archives of Surgery*, October, 1943) point out that more recent experimental and clinical observations suggest that this is not so. They report a case of theirs in which cure did occur spontaneously. Reid and McGuire, writing in 1938, advised against immediate or early operation in such cases except when hæmorrhage was occurring, when diffuse hæmatoma or infection was present, when rapid cardiac damage was taking place, or when the venous pressure was rapidly rising. The advantages of delay were claimed to be that blood clot was absorbed and dissection and identification of structures rendered easier, the danger of infection was lessened, and a collateral circulation was allowed to develop. In the absence of the above-mentioned indications for early interference, the authors believe with the authors quoted, that delay is advisable. However, the patient should be carefully observed, and the patient and the part kept at rest. Signs which would indicate the possibility of spontaneous closure include a diminution in intensity of the local thrill and bruit, a lessening of the variations in blood presure and pulse rate which are observed on digital control of the fistula, and absence of evidence of local or systemic alterations such as cardiac dilatation. The case reported is one of a young Negro who sustained a stab wound of the groin leading to a fistula between the femoral artery and vein. As early as seven hours after the injury a pronounced thrill and a loud bruit could be detected over the site of injury. Conservative treatment was adopted. Three months later local signs were virtually unchanged, and no systemic effects had arisen. Three months later again, an examination revealed that the fistula had completely closed.

Early Post-Operative Ambulation.

H. NELSON (*Archives of Surgery*, July, 1944) has observed the excellent healing of wounds in children, in spite of the fact that their activities after operation are not restrained and may at times approach violence. He has also noted similar excellent healing of wounds in laboratory animals, post-operative wound complications being noticeably absent, and disruption of wounds not occurring. He has therefore commenced to put the principles of early activity to the test in the post-operative treatment of his patients, and now reports a series of 429 operations through the abdominal wall with opening of the peritoneal cavity, after all of which early ambulation was allowed, all the patients being allowed up within seventy-two hours of operation. The operations include appendicectomy, hernioplasty, gastric and intestinal operations, operations on the biliary tract and various other procedures. The author insists that early ambulation should be allowed only when cotton or wire sutures have been used. The use of catgut suture material precludes early rising. Other contra-indications are conditions for which absolute rest is needed, such as shock, peritonitis, hæmorrhage, cardiac failure, pneumonitis, threatened or actual wound complications such as infection, extreme debility and such states. But in the absence of such contraindications, and provided the correct method of suturing has been used, patients are allowed up. The activities of the patient are not completely unrestricted, but are graduated. Shortly after recovery from the anæsthetic, the patient sits on the side of the bed. Breathing and coughing are encouraged. After a rest, he is allowed to stand, and may go to the bathroom to pass urine. Activity is increased according to the individual response of the patient. It is important that protein and vitamin requirements for wound healing should be attended to. Nelson claims that the incidence of wound complications, chest complications and thrombosis has been lower than might be expected in a similar series of cases treated by complete bed rest. Three partial disruptions of a wound occurred, but in two cases catgut had been used for suture material and early ambulation had not been authorized by the surgeon. In the other case, an error of judgement was responsible, as the patient did not receive necessary transfusions after a large blood loss. Only two incisional herniæ were observed in the whole series, and both of these were small. One incisional hernia recurred after an inadequate primary repair.

Lobectomy of the Liver.

RESECTION of large lesions of the liver is a relatively rare procedure, but one which a surgeon may be called on to perform unexpectedly, as a diagnosis of such resectable lesions is rarely made before laparotomy. K. L. Pickrell and R. C. Clay (*Archives of Surgery*, April, 1944) discuss this question and report three cases occurring within a period of four months, in which resection of the whole left lobe of the liver was performed. Large portions of liver substance may be removed, and regeneration is so rapid that usually no loss of liver function occurs. The main difficulty to be faced is the operative difficulty of the control of hæmorrhage. Various methods have been practised, such as compression of the vessels in the free edge of the lesser omentum, manual pressure on the hepatic substance at the edge of the wound, the placing of clamps across the liver, the use of an elastic tourniquet, and the use of a cautery. In the three patients operated on by the authors, the lesion was found in the left lobe. It is suggested that in such cases the whole of the left lobe should be excised through the interlobular sulcus. The liver was mobilized by dividing through the falciform ligament just below its attachment to the diaphragm. A series of braided silk sutures were then placed, one set on each side of the interlobular sulcus, the knots being tied on the under surface of the liver and the ends left long. The liver was then divided with the scalpel between the two sets of sutures, and this division was found to be bloodless, and there was no leakage of bile. The portion of the falciform ligament left attached to the liver was then turned down over the raw surface and fixed in place, the free ends of the silk sutures being used. The liver was again fixed in position by suturing the free edge of the upper part of the falciform ligament to the line of attachment of the lower part of this ligament to the liver. In each case the abdominal wall was closed without drainage. There were no post-operative complications, and the patients have remained well. The pathological lesions for which the operation was performed were a primary carcinoma of the liver, a hæmangioma, and a gumma. It is emphasized that operation is not being recommended for gumma of the liver, but that in the case reported the diagnosis of gumma was not made until the tumour had been excised and sections made.

British Medical Association News.

ANNUAL MEETING.

THE annual meeting of the Queensland Branch of the British Medical Association was held at B.M.A. House, Wickham Terrace, Brisbane, on December 15, 1944, DR. L. P. WINTERBOTHAM, the President, in the chair.

ANNUAL REPORT OF COUNCIL.

The annual report of the Council, which had previously been circulated to members, was taken as read on the motion of Dr. Felix Arden, seconded by Dr. F. W. R. Lukin, and adopted on the motion of Dr. A. E. Lee. The annual report is as follows.

The Council has pleasure in presenting the following report of the work of the Branch for the year ending November 15, 1944.

Membership.

The membership of the Branch is 627, as against 585 last year, making a gain of 42. The total membership includes four complimentary members. Thirty-five honorary associate members were elected during the year.

The gains were: new members, 57; transferred from other Branches, 4; members reinstated, 3.

The losses were: members transferred to other Branches, 8; resignation, 1; membership ceased by expulsion, 1; deceased, 10; default in payment of subscription, 2.

There is a total of 176 members engaged on full-time duty with His Majesty's Forces, which represents 26% of our membership. During the year the following members resumed civilian practice: Dr. John Russell, Dr. B. J. Butcher, Dr. R. Fulton Craig, Dr. D. Gifford Croll, Dr. L. H. Foote, Dr. A. S. Furness, Dr. A. K. Green, Dr. W. E. Hasker, Dr. C. F. Hecker, Dr. M. J. Hishon, Dr. Horace W. Johnson, Dr. K. R. McGregor, Dr. E. Mansfield, Dr. A. E. Mason, Dr. Ellis Murphy, Dr. H. C. Murphy, Dr. Wilfred Park, Dr. G. W. Pottinger, Dr. K. B. Shallard, Dr. Norman L. Sherwood, Dr. T. V. Stubbs Brown, Dr. J. C. Squires, Dr. N. C. Talbot, Dr. A. C. Ward, Dr. Dacre Weedon, Dr. M. Graham Wilson.

In accordance with the custom of the British Medical Association, Dr. A. J. Turner, who has completed fifty years as a member of the Association, has been granted honorary membership. Another honorary member in this category is Sir David Hardie, M.D., who completed his fifty years of membership in 1938.

Obituary.

It is with deep regret that we record the death of Dr. C. E. Wassell, who was a Past President and a member of the Council; Dr. J. Lockhart Gibson, one of the oldest members of the Branch and a Past President; and Dr. Kenneth Wilson, who had been a member of the Council and an Honorary Secretary of the Branch.

The Branch has also sustained a loss by death of the following members: Dr. J. R. Nicoll, Dr. E. W. F. Dolman, Dr. Anton Breinl, Dr. T. P. Connolly, Dr. E. Bruce Smith, Dr. C. J. Weedon, Dr. H. J. Birchley.

Meetings.

General.

In addition to the annual meeting, thirteen meetings of the Branch were held, three of which were clinical meetings, and two were called to discuss the problem of a general medical service for Australia. One of the special meetings was called to give members an opportunity of hearing Sir Howard Florey's lecture on "Penicillin". The average attendance was forty-eight.

Council.

Twenty-one ordinary and one special meeting was held. The record of attendances of the Council is as follows:

	Ordinary.	Special.
Dr. L. P. Winterbotham (President) ..	20	1
Dr. H. W. Horn (President-Elect and Chairman of Committees)	18	1
Dr. Alan E. Lee (Past President and Federal Council Representative) ..	19	1
Dr. W. H. Steel (Honorary Secretary)	20	1
Dr. J. G. Wagner (Honorary Treasurer)	19	—
Dr. Felix Arden (Councillor)	17	1
Dr. J. G. Avery (Honorary Secretary of Committees)	18	1
Dr. R. B. Charlton (Councillor)	18	—
Dr. D. Gifford Croll (Councillor)	13	1
Dr. Milton Geaney (Councillor)	15	1
Dr. P. J. Kelly (Councillor)	16	1
Dr. F. W. R. Lukin (Councillor)	13	1
Dr. S. F. McDonald (Councillor)	14	1
Dr. C. C. Minty (Councillor)	21	1
Dr. Mervyn S. Patterson (Councillor) ..	16	1
Dr. T. A. Price (Vice-President, Councillor and Federal Council Representative)	8	1
Dr. J. Lloyd Simmonds (Councillor) ..	16	1
[2] Dr. Evan R. W. Thomson (Councillor)	2	
[1] Dr. C. E. Wassell (Councillor)	1	

Scientific.

February.—Clinical meeting in conjunction with the Brisbane Hospital Clinical Society.

March.—Lieutenant-Colonel H. F. Ulrich, Medical Corps, United States Army: "The Ultimate Fate of Front-Line Amputations." Major D. Officer Brown, Australian Army Medical Corps: "The Wartime Aspects of Plastic Surgery."

April.—Dr. Felix Arden: "The Commoner Abdominal Tumours of Children."

May.—Professor John Bostock: "The Doctor and the Pre-School Child."

June.—Air Vice Marshal Victor Hurley, C.M.G., V.D., M.D.: "The Role of the Medical Services in Modern Warfare with a Review of some of the Medical Problems of the present World War." (Joseph Bancroft Memorial Lecture.)

July.—Clinical meeting in conjunction with the Clinical Societies of the Mater Misericordiæ Public and Children's Hospitals.

August.—Major J. I. Lowenthal and Captain J. W. Perry, Australian Army Medical Corps: "Penicillin" (illustrated by a silent film).

September.—Dr. Alan E. Lee: "The History of Appendicitis in Australia." (Jackson Lecture.)

September (Special Meeting).—Sir Howard Florey: "Penicillin."

October.—Sir Raphael Cilento, Kt., M.D.: "Social Medicine."

November.—Clinical meeting in conjunction with the Brisbane General Hospital Clinical Society.

Office-Bearers and Councillors.

Dr. H. W. Horn was elected President-Elect for the ensuing year and Dr. W. H. Steel was elected Honorary Secretary.

The following office-bearers were elected by the Council:

Honorary Treasurer: Dr. J. G. Wagner.
Chairman of Committees: Dr. H. W. Horn.
Honorary Secretary of Committees: Dr. J. G. Avery.
Honorary Librarian and Curator of Museum: Dr. Neville G. Sutton.
Assistant Honorary Librarian: Dr. Konrad Hirschfeld.

Dr. W. H. Steel, who has been Honorary Secretary for the past two and a half years, is not able to carry on this office. The Council wishes to record its appreciation and thanks to him for his services in this capacity.

It is regretted that Dr. S. F. McDonald, a Past President of the Branch and a Councillor for many years, who has served actively on many committees, has decided not to seek reelection for the coming year. He has always been keenly interested in the affairs of the Branch and will be greatly missed from Council meetings. The Council records its sincere appreciation and thanks to Dr. McDonald for the service rendered by him over a long period.

It is with regret that we record the death of Dr. C. E. Wassell, who was a Past President and had been a member of the Council for a number of years.

Dr. Evan R. W. Thomson was appointed to fill the vacancy caused by Dr. Wassell's death.

Ethics Committee.

At the annual meeting of the Branch held on December 10, 1943, the following were elected members of the Ethics Committee: Dr. Alex. Marks, C.B.E., D.S.O., V.D., Dr. G. P. Dixon, C.B.E., V.D., Surgeon Commander Gavin Cameron, Dr. M. Graham Sutton, Dr. L. J. J. Nye.

No matters were dealt with by the committee during the year.

Library.

During the year one hundred and ten books were borrowed from the library by twenty-nine members.

[1] Deceased August 22, 1944.
[2] Appointed to fill vacancy caused by Dr. Wassell's death.

It is pleasing to note that the library has been well patronized by medical officers attached to the United States Army and by members of the Australian Army Medical Corps from other States stationed near Brisbane.

The only addition to the library this year is "Oral Methods of Immunization", by Burton Bradley, which was presented to the library by the author.

Representation.

The Branch was represented as follows during the year:

Council of the British Medical Association: Professor R. J. A. Berry.

Federal Council of the British Medical Association in Australia: Dr. T. A. Price and Dr. Alan E. Lee.

Federal Council, Contract Practice Committee: Dr. L. P. Winterbotham.

Australasian Medical Publishing Company, Limited: Dr. D. Gifford Croll, Director; Dr. T. A. Price and Dr. Alan E. Lee, Members.

Medical Officers' Relief Fund (Federal): Queensland Committee, Dr. D. Gifford Croll, Dr. G. P. Dixon, Dr. W. H. Steel.

Medical Assessment Tribunal: Dr. A. H. Marks.

Queensland Medical Board: Dr. D. Gifford Croll, Dr. J. G. Wagner, Dr. Felix Arden.

Post-Graduate Medical Education Association: Dr. S. F. McDonald, Dr. Alan E. Lee, Dr. Alec. E. Paterson.

Queensland Medical Coordination Committee: Dr. F. W. R. Lukin.

Queensland Cancer Trust: Dr. Alan E. Lee, Dr. Milton Geaney.

Queensland Radium Institute: Dr. Alan E. Lee.

Queensland Nutrition Council: Dr. P. A. Earnshaw, Dr. Noel M. Gutteridge.

Queensland Bush Nursing Association: Dr. L. Bedford Elwell.

Standards Association of Australia: Dr. E. O. Marks.

Flying Doctor Service of Australia: Dr. Harold Crawford.

Red Cross Society Blood Transfusion Service Committee: Dr. Milton Geaney.

Red Cross Society Appeal Committee: Dr. L. J. Jarvis Nye.

The Surf Life Saving Association of Australia, Queensland State Centre: Dr. F. W. R. Lukin.

Physical Fitness Association of Queensland: Dr. E. S. Meyers and Dr. Harold Crawford.

The Editor of THE MEDICAL JOURNAL OF AUSTRALIA was represented by Dr. Felix Arden.

War Emergency Organization.

Rehabilitation of Members of the Armed Services.

A special subcommittee of the Branch has been appointed to deal with this matter, the personnel being Dr. J. G. Wagner, Dr. F. W. R. Lukin, Dr. C. C. Minty, Dr. Ellis Murphy and the ex-officio members of the Council. A joint meeting with representatives of the Queensland Medical Coordination Committee was held on September 5, and the Federal Council was requested to take action along the lines indicated, namely: (i) Medical officers whose units are staging should have opportunity for post-graduate work and hospital experience at the nearest available military hospital. It was requested that the Central Medical Coordination Committee and also the Director-General of Medical Services be approached by the Federal Council. (ii) Hospital experience should be provided for medical officers in service hospitals by the Director-General of Medical Services by rotation of appointments and in civilian hospitals through the medium of the Medical Coordination Committees by temporary appointments.

These two recommendations concerned officers while remaining in the services.

Regarding officers discharged from the services prior and subsequent to the cessation of hostilities, the following arrangements are to be made: Post-graduate facilities, through the Queensland Post-Graduate Medical Education Committee, and hospital experience and placement, which are the responsibility of the Queensland Medical Coordination Committee in collaboration with the British Medical Association and the Minister for Health and Home Affairs.

It is also suggested that suitable consideration should be given to medical officers, either senior or junior, whose military experience was administrative only, and special consideration should be given to prisoners of war.

It is proposed to prepare a survey of openings and placements in Queensland, and every assistance possible will be given to members when they return to civil life.

Queensland Medical Coordination Committee.

Dr. F. W. R. Lukin was reappointed representative of the Branch on the Queensland Medical Coordination Committee for the year 1944.

During the year the control of the Coordination Committee was transferred from the Department of Defence to the Department of Health.

The transfer of administration from the Minister for Defence to the Minister for Health caused a certain amount of misgiving. It was stated in a letter from the Prime Minister's Department that the Central Medical Coordination Committee was set up as a wartime measure only.

Publication of the Names of Demobilized Medical Officers.

Lists of the names of demobilized medical officers are published in THE MEDICAL JOURNAL OF AUSTRALIA from time to time for the information of their colleagues.

By-Law 52 (1): Commencement of Practice during War Period.

The question of amending this by-law was submitted to members in the services for an expression of opinion as to whether it should not be applicable to any member of the Branch who has been a member of His Majesty's Forces full time for a period of twelve months immediately preceding the passing of this by-law and who desires to commence practice. As a result of the replies received, it was decided that the by-law be left as at present.

Medical Benefits for Dependants of Deceased Soldiers.

This matter has been under consideration for the past four years between the Repatriation Commission and the Federal Council, but no finality has yet been reached.

Medical Certificates.

Great exception is still being taken to the number of certificates required for obtaining certain articles, which it is considered should be replaced by statutory declarations, and further representations are being made to the Commonwealth Government by the Federal Council on the matter. A number of firms use this method of demanding medical certificates as a means of conserving their stocks of commodities which are in short supply, and it causes unnecessary work and embarrassment to medical practitioners.

Certificates for Release from Employment et cetera

A number of medical certificates has been referred to the Council for consideration as to their authenticity. If members would always use the printed forms of certificates drawn up by the Council both for sickness and release from or change of employment on medical grounds, many of the difficulties in regard to certification would be obviated.

At the request of the Director-General of Health, members were circularized, drawing their attention to the fact that they should give particular attention to the nature of the certificates they give to applicants in various categories, as they may be used in such a way as to bring the medical practitioner unwittingly within the peril of Section 35 (iv) of the *Medical Act* of Queensland.

Monthly News Letters to Members in the Forces.

The Publicity Committee responsible for the news letters is still continuing to receive letters of appreciation and thanks for the information conveyed by this means to members in the forces who state that this keeps them abreast of current affairs, although the statements contained therein emanate from the writers alone, and do not necessarily represent the views of the Branch Council.

At the request of a number of members the monthly news letters are now sent to all members of the Branch.

Queensland Medical War Benefit Fund.

All members of the Branch have been urged to become members of the Queensland Medical War Benefit Fund. This fund is now State-wide both with regard to contributors and benefactors, and a circular giving full information on the matter was sent to members of the Branch by the President on May 26 last. The Queensland Trustees Limited assist the trustees in the administration of the fund.

Rationing.

Essential Foods.—The supply of essential foods to special classes of the community, such as expectant mothers, young children and invalids, has engaged the attention of the Nutrition Subcommittee. In March the Deputy Director of Rationing was interviewed concerning the matter and

expressed himself in agreement with the views put forward by representatives of the Branch. The Minister for Health and Home Affairs was also urged to arrange for the reestablishment of the delivery of essential goods. Traders' organizations and other interested parties have been approached on the matter with a view to bringing about improvement in the position.

Liquid Fuel Supplies.—Metropolitan members have been greatly assisted in obtaining their requirements in petrol through the special subcommittee appointed to deal with the matters, the personnel of which is Dr. L. P. Winterbotham (chairman), Dr. A. G. Anderson and Dr. Alec. Paterson. Mr. F. K. Davis, acting manager of the British Medical Agency of Queensland, acts as honorary secretary, and he is untiring in his efforts to help members in every way possible, and to provide a liaison between them and the Board controlling the supply of liquid fuel, and thus saving the time of doctors in dealing with the necessary formalities.

Motor-Car Tires and Accessories.—Wherever possible the supply of tires and accessories to members has been facilitated.

Linen for Doctors' Surgeries.—Members are also assisted to obtain their supplies and replenishments of surgery linen through a subcommittee comprising Dr. L. P. Winterbotham, Dr. J. G. Avery, Dr. A. E. Paterson and Mr. F. K. Davis as secretary.

Re Surgeons' Operating Gowns.—The present position is that special purchase permits are granted to doctors for the purchase of operating gowns and trousers for operations performed in their own surgeries or where they provide their own garments for operations at hospital. All applications must be submitted through the Branch subcommittee.

General Medical Services.

A *questionnaire* was sent to members in August asking their views on the subject of a general medical service. Two hundred and fifty replies were received and analysed.

On September 8 a special general meeting was held when the following resolutions were carried:

1. That a whole-time salaried basis for a nation-wide medical service is not in the best interests of the community.

2. That if a general medical service is introduced an income limit be not imposed.

At its meeting held in Melbourne from September 25 to 28, the Federal Council decided that it is willing to discuss any scheme put forward by the Commonwealth Government, provided—

(*a*) That the negotiations shall not proceed beyond the stage of discussion until one year after the war.

(*b*) That the scheme retains the existing doctor-patient relationship.

(*c*) That the scheme shall be free from departmental or any other method of control which would interfere with the freedom of the profession and the public.

A full report of the present position is published in THE MEDICAL JOURNAL OF AUSTRALIA of October 28, 1944. The General Secretary of the Federal Council is paying a visit to New Zealand to investigate the fee-for-service system which is in operation in the Dominion.

Pharmaceutical Benefits Act.

A statement setting out the reasons for the opposition of the profession to the *Pharmaceutical Benefits Act* has been drawn up for distribution by doctors to their patients.

The main reason for this attitude to the act is because it interferes with the freedom of the doctor in prescribing according to the patients' needs, and with the patient because he is excluded from the benefits of the act if the prescription does not come within the ambit of the formulary.

Organization Subcommittee.

Early in the year the powers of the Organization Subcommittee were increased and the following resolution was passed by the Council:

That the Organization Subcommittee be given power to act in matters which come before it, provided they are not matters of policy and are not controversial.

Reports are submitted to the Council as heretofore.

Personnel.—Dr. J. Lloyd Simmonds, Dr. Felix Arden, Dr. Kelly, Dr. Robin Charlton, Dr. C. C. Minty, Dr. P. J. Kelly and the ex-officio members of the Council.

During the year twenty-one meetings were held and many important matters were dealt with and recommendations made to the Council. The following are some of the subjects which are not dealt with under any other heading in this report.

Public Health.

Immunization against Whooping Cough.—An expression of opinion was requested on behalf of the Brisbane City Council regarding the efficacy of immunization for whooping cough. The matter was referred to pædiatricians, and subsequently a reply was sent promising strong support of any effort on the part of the Brisbane City Council to introduce whooping cough immunization on a large scale.

The question of a combined diphtheria and whooping cough immunization is being investigated, and the Commonwealth Serum Laboratories are carrying out experiments.

Re Lead Poisoning.—The attention of the authorities was again drawn to the incidence of lead poisoning in Queensland, and a request was made for the enforcing of the regulations restricting the use of lead in paint on certain areas within the reach of young children, such as veranda railings *et cetera*. In some cases it had been found that 38% of soluble lead was used in paint being applied to veranda railings on houses being erected by the War Service Homes Commission. The difficulty has been the "freezing" of zinc oxide by the Commonwealth Government. In a circular to members they were reminded that lead poisoning is notifiable under the *Health Act*.

Tetanus "Notifiable".—The attention of members has been drawn to the fact that in the *Government Gazette* of September 16, 1944, tetanus has been declared a "notifiable disease".

Milk Supply.—The Council has taken part in the question of the provision of a pure milk supply.

During the year great controversy has taken place regarding milk in relation to tuberculosis, and it is to be deplored that the general pasteurization of milk is not being insisted on by the authorities.

Steps were taken by the Government to have fresh milk supplies available for mothers and babies travelling by rail.

Housing Standards.—The Council supported the National Council of Women in a protest against the Commonwealth Government proposal for a housing scheme at Rocklea, and a special subcommittee dealt with the matter and submitted a report to the Federal Minister. Subsequently the plans were improved, particularly the size of the bedrooms, which were the main subject. This subcommittee also dealt with reports on housing standards received through the Federal Council from the Technical Bodies Advisory Committee on Post-War Reconstruction and furnished a report on the various aspects as they affect Queensland.

Men's Summer Dress Reform.—The introduction of coat shirts is still progressing favourably and tramway employees have adopted them. It is understood that other bodies of uniformed men are giving the question serious consideration.

The committee responsible for the reform hopes that more doctors will give the movement added support by wearing coat shirts.

Closing Butchers' Shops on Saturday Mornings.—So important is this matter considered to be to the health of the community in this State that an emphatic protest has been entered against it by the Council, and evidence is to be given on behalf of the Branch in support of our arguments when the Commonwealth Court of Conciliation and Arbitration sits in Brisbane.

Re Malaria Treatment.—Members were advised that cases of malaria of the 1939 war occurring amongst ex-members of the services who call on medical practitioners for treatment should be referred in the city to the Repatriation Commission or to the Repatriation General Hospital, Rosemount, and in the country they should be referred to the local repatriation medical officer.

Re Notification of Dengue Fever.—Under Amended National Security Regulations, a fee of two shillings is payable to medical practitioners in respect of each notification.

Tuberculosis.—A great deal of Press publicity has been given to the question of the treatment of patients suffering from pulmonary tuberculosis, in which the Branch took part, and it is satisfactory to note that after many years of urging the Government intends taking action to endeavour to lessen the incidence of the disease, and the economic wastage resulting therefrom, by providing facilities for prevention and suitable treatment. Such measures are long overdue, and will be welcomed by the profession.

Re Sterility Clinic at the Brisbane Hospital.—In September a clinic for the investigation and treatment of sterility and subfertility was opened at the Brisbane Women's Hospital and is doing very useful work. At the request of the General Superintendent members of the Branch were informed of its establishment.

School Swimming Pools.—The matter of the purification of water in swimming pools in Brisbane was taken up by the President of the Branch, in view of Press publicity on the subject, and he quoted information from the report issued by the Ministry of Health in England concerning the purification of water in swimming pools and an American text-book on disinfection and sterilization in support of his statements.

Committee of Inquiry into Sex Offences.—The President represented the Branch on a committee appointed by the Queensland Government to consider and report on the incidence of sex crimes and offences. This committee has issued its report to the Government.

Re the Incidence of Venereal Disease in Young Women in Relation to the Birth Rate.—In connexion with a meeting of the National Health and Medical Research Council, members of the Branch interested in the subject furnished reports which were sent to the representative of the Federal Council on the above-mentioned body.

Re Broadcast Talks on Venereal Disease et cetera.—In October the Parliamentary Standing Committee on Broadcasting took evidence in Brisbane regarding the advisability of broadcast talks on (*a*) venereal disease and (*b*) sex relationships generally, and requested the appointment of a representative of the Association to give evidence. The President represented the Branch, and, in his evidence he expressed the opinion of the Council that it is not in favour of broadcasts on such matters.

Re Queensland Radium Institute.—By an Order in Council published in the *Government Gazette* of March 4, 1944, notification was given of the constitution of the Queensland Radium Institute, wherein provision is made for the nomination of a medical practitioner by the British Medical Association. Dr. Alan E. Lee was nominated and subsequently appointed a member of the Queensland Radium Institute.

A circular was sent out to members early in November giving details of the policy of the institute in relation to the treatment of cancer, in which it was stated that it is not proposed to make cancer or pre-cancerous conditions a "notifiable disease', and that doctors are perfectly free to treat conditions of cancer as they think proper, and patients are free to choose their own medical advisers. Up to the present the Queensland Radium Institute is limiting its activities to the free treatment of conditions suitable for radiotherapy.

Flying Doctor Service.—We have been informed that the general policy of the Flying Doctor Service is to give medical service where urgently required in outback districts, and to work in harmony with doctors stationed in the different districts. Due care is taken not to interfere with the work of these doctors, but to give them as much assistance as possible. No fees are charged by the Flying Doctor Service.

Re Administration of Morphine by Senior Members of the Ambulance Transport Brigade to Persons Injured as the Result of an Accident.—In reply to an inquiry from the Director-General of Health, the Council stated that the proposal is approved from the humanitarian standpoint and with the safeguards mentioned, namely, that the Brisbane Hospital Dispensary provides suitable doses for immediate use, in minimum quantities, adequately recorded and supervised, and it was suggested that directions be drawn up by the Medical Superintendent of the Brisbane and South Coast Hospitals Board for the guidance of ambulance bearers.

Industrial Health.—Recognizing the increasing importance of the influence of occupation on health under modern industrial conditions, the Council has set up an advisory committee and has sought the cooperation of members of the Branch in obtaining early notification of accidents and illness that might reasonably be attributed to conditions of work and may repay further investigation by the proper authorities. Members have also been advised of the laboratory services which are available free of cost for assistance in the diagnosis of industrial disease if the patient cannot afford private fees.

Re Lay Psychoanalysts.—In reply to an inquiry from a layman as to what qualifications would be necessary before recognition would be granted to enable him to work in collaboration with a medical practitioner as a psychoanalyst, the Council stated that the holding of a medical degree would be essential.

Medico-Legal Fees.—As a result of representations made by the Council, the scale of allowances to professional witnesses attending supreme and circuit courts *et cetera* have been increased. Provision is now made for compensation for loss of practice in respect of the period necessarily absent from practice for more than twenty-four hours at £3 3s. per day (of 24 hours). An allowance of £1 1s. per day is made for attendance and travelling to and from court, and £1 1s. for giving evidence.

Locum Tenentes' Fees.—On June 23, 1944, it was resolved that the fees for *locum tenentes* be at the rate of £14 14s. per week and not £12 12s. as heretofore.

Surf Life Saving Association, Queensland.—In response to an inquiry concerning the payment for professional services for doctors who have been called to attend surf rescue cases, the opinion was expressed that, instead of a retaining fee as suggested, a fee of £1 1s. per service, *plus* mileage, be paid to the doctor by the Department of Health.

Relationship between Members and Alien Medical Practitioners.—In response to an inquiry, the following was given as a ruling of the position in general:

1. There is no reason why an alien, who is a qualified medical practitioner, should not be met in consultation.

2. It is considered undesirable to meet in consultation practitioners whose actions are not in conformity with the by-laws of the Branch.

3. An individual doctor has the right to refuse to meet any medical practitioner whose standard of practice does not meet with his approval.

Nutrition Pamphlets.—(*a*) Nutrition during Pregnancy and Nursing. (*b*) Recommended Diet (for General Use). The pamphlets, which were drawn up by a special subcommittee, are based on modern methods of nutrition in a form suitable for doctors to give to their patients, and are being used by members in increasing numbers.

Food Composition Tables.—Copies of a new edition of these tables supplied by the Council for Scientific and Industrial Research have been distributed to members through the Branch.

Proposed Abolition of Evening Consulting Hours.—This question has been under consideration by groups of general practitioners in the metropolitan area. In view of the opinions expressed, it was decided by the Council that it is a matter for individual arrangement.

Expulsion from Membership of the Branch.—As complaints made against a member in accordance with the by-laws of the Branch were established and proved, steps were taken by the Council for his expulsion from membership.

Hospital Matters.

Subcommittee Appointed.—Dr. D. Gifford Croll, Dr. S. F. McDonald, Dr. Milton Geaney, Dr. Felix Arden.

No meetings of the subcommittee were held during the year, but the following matters were dealt with by the Organization Subcommittee or by the Council direct.

Hospital Bill.—A Hospital Bill to provide a Health Service and to amend the *Hospitals Acts*, 1936 to 1943, is at present before Parliament. As no provision is made for direct representation of the medical profession on hospital boards, the Government has been approached through the Minister for Health and Home Affairs in an endeavour to have this short-sighted policy corrected. It is difficult to understand why the Hospital Board should be deprived of the expert help that can be only supplied by independent members of the medical or nursing profession.

It is interesting to recall that in 1927 the then Government of the day was requested to at least appoint a technical Advisory Committee to assist the Hospital Board, but in their unwisdom they failed to accede to the request. Perhaps many of the mistakes made would have been avoided had such an Advisory Committee been constituted.

Lack of Hospital Accommodation.—This difficulty, which, of course, is not peculiar to Queensland, has been exercising the mind of the Council, because Brisbane, more than any other city, has had an abnormal influx of population over the past few years. Owing to circumstances beyond their control, such as manpower regulations, a number of private hospitals have had to close down, and this has caused an extra strain on the already overtaxed hospitals which come under the administration of the Brisbane and South Coast Hospitals Board; particularly is this so in the case of the Women's Hospital.

The Minister for Health and Home Affairs was asked by the Council to arrange a conference of interested parties to consider the matter, and endeavour to ascertain the true position and to make suggestions for improvement. As the Minister did not act on this suggestion, a conference of interested parties is being called by the Council.

Re Salaries of Junior Resident Medical Officers Employed by the Brisbane and South Coast Hospitals Board.—With the support of the Council representations were made to the Brisbane and South Coast Hospitals Board for a revision of the remuneration and conditions of employment of the junior resident medical officers.

As no satisfactory agreement was reached by the parties, it was decided by the resident medical officers concerned to submit the matter to the Queensland Industrial Arbitration Court. This resulted in an award being granted which came into operation as from October 23, 1944, and is to remain in force for a period of twelve months from that date. The award applies to first year resident medical officers employed by the Brisbane and South Coast Hospitals Board, and provides for a salary of £350 *per annum* with free board and lodging and a fifty-four hour working week averaged over a period of four weeks, and not more than sixteen hours in any one shift.

Lodges.

The Joint Committee, which acts as a liaison between the Friendly Societies Medical and Hospital Council and lodge medical officers, met on two occasions. The representatives of the Branch are Dr. L. P. Winterbotham, Dr. T. A. Price, Dr. F. W. R. Lukin and Dr. H. W. Horn.

Capitation Fee, Metropolitan Area.—The lodge capitation fee for the year commencing July, 1944, was notified by the Government Statistician's office, in accordance with the agreement promulgated in 1934, at 32s. per adult member *per annum*.

Some difficulty arose owing to the lodges having approached the Deputy Prices Commissioner concerning the increased rate, but the matter has been satisfactorily settled for the time being, which is fortunate, as it would have meant the resignation of the majority of medical officers from their appointments if the agreement had not been adhered to. The Friendly Societies Medical and Hospital Council intend approaching the Federal Minister for Trade and Customs with the object of having the whole position clarified for the future.

Rockhampton Lodges.—It is satisfactory to note that the method of fixing the lodge capitation fee in accordance with the rise and fall of the nominal wage index figure has been adopted by the Rockhampton lodges and medical officers.

Re Medical Certificates.—Representations were made by the Registrar of Friendly Societies concerning the refusal of a hospital medical officer to sign fortnightly certificates for sick pay. A reply was sent to the effect that it is considered such certificates are unnecessary and an imposition on the doctor, and that lodges have been previously informed of our opinion. It is, however, incumbent upon lodge medical officers to give certificates according to the agreement.

Re Federal Common Form of Agreement.—The Council has expressed itself in favour of the implementation of the Federal Common Form of Agreement, as drawn up in 1940.

Affiliated Local Associations.

Downs and South-Western Medical Association.

Meetings.—Two meetings of the Executive Committee were held on April 3, 1944, and May 2, 1944.

It was decided not to hold any clinical meetings and no lecturers from the Queensland Post-Graduate Committee visited Toowoomba.

Membership.—The Association suffered a great loss with the sudden passing of the esteemed President, Dr. T. P. Connolly, who took a very active interest in the affairs of the Association. Our sympathies are with his family in their sorrow.

We regret to record the untimely death of a member and former President, Dr. E. Bruce Smith. We extend our sympathies to his family.

Dr. Graham Wilson and Dr. R. J. H. Spark have been released from full-time duties with the Australian Military Forces, and Dr. Ian Horn has been released from full-time duties with the Royal Australian Air Force, and all have resumed civilian practice.

Election of Officers.—President, Dr. G. V. Hickey; President-Elect, Dr. V. R. Woodhill; Honorary Secretary, Dr. C. R. Morton; Honorary Treasurer, Dr. V. R. Woodhill; Honorary Auditors, Dr. V. R. Woodhill and Dr. C. R. Morton.

General.—It is hoped that with the slight easing of the strain on medical practitioners we will this coming year be able to resume our clinical meetings and have lecturers from the Queensland Post-Graduate Committee visit us once more.

C. R. MORTON,
Honorary Secretary.

Rockhampton Local Medical Association.

This year has been uneventful, and the new arrangement with the lodges whereby the capitation fee varies with the effective wage index is satisfactory to all parties.

The annual meeting was held on August 12, 1944, and was preceded by a dinner which was attended by all the members.

The following office-bearers were elected for the ensuing year: President, Dr. F. C. Wooster; Vice-President, Dr. C. N. Matheson; Honorary Secretary, Dr. R. Palmerston Rundle.

The other members of the local association are: Dr. Doris Skyring, Dr. T. A. Parry, Dr. V. T. J. Lynch, Dr. D. B. Walker, Dr. P. E. Voss, Dr. J. C. Ross, Dr. N. C. Talbot, Dr. Adah Stuart, Dr. W. E. Hasker, Dr. J. Bruce Gordon, Dr. B. R. V. Forbes.

R. PALMERSTON RUNDLE,
Honorary Secretary.

Other Local Medical Associations.

The Cairns, Maryborough and Charleville Local Associations report that, owing to the war position, they are unable to hold meetings.

British Medical Agency of Queensland Proprietary Limited and Queensland Medical Finance Proprietary Limited.

The British Medical Agency of Queensland continues to function successfully under the able supervision of the acting manager, Mr. F. K. Davis. Its activities have been of great assistance to members of the Branch, which is the real purpose for which it was established.

Owing to existing conditions the scope of the finance company is considerably restricted, but it is in a position to operate when the need arises.

Federal Council.

During the year four meetings of the Federal Council were held, namely, January, May, June and September, and many important matters were dealt with. Full reports of the proceedings of each meeting were published in THE MEDICAL JOURNAL OF AUSTRALIA subsequent to the meetings.

The Branch was represented at these meetings by Dr. T. A. Price and Dr. Alan E. Lee, except at the May meeting, at which Dr. D. Gifford Croll took the place of Dr. Price, who was unable to attend.

The Australasian Medical Publishing Company, Limited: "The Medical Journal of Australia."

At the request of the Federal Council the Australasian Medical Publishing Company, Limited, has agreed to resume the publication of the list of members of the Branches of the Association in Australia.

The directors of the company have decided to continue the generous rebate to the Branches of ten shillings for each member who has totally relinquished civil practice as at December 31, 1944, for continuous full-time service in His Majesty's Forces.

Medical Board of Queensland.

In accordance with *The Medical Act*, 1939 to 1940, Dr. D. Gifford Croll, Dr. J. G. Wagner and Dr. Felix Arden were nominated by the Council as representatives of the Branch for appointment to the Medical Board of Queensland for a period of five years commencing from December 2, 1944.

University of Queensland.

Queensland Post-Graduate Medical Education Committee.—This committee, which is a conjoint committee of the University and the British Medical Association, commenced its activities during the year. A series of four successful week-end post-graduate courses have been held, which attracted excellent attendances, including members of the American Medical Forces. Some of the clinical meetings took place at United States of America service hospitals.

It is expected that this committee will take an active part in the programme for rehabilitation of medical officers of the armed forces.

Queensland Medical Students' Loan Fund.—During the year copies of the Constitution were circulated to members of the Branch, accompanied by a letter from the President, as a result of which the fund was augmented by the sum of £78.

A meeting of medical students was held in June, when the Constitution was explained to them, and subsequently various groups forwarded donations.

A representative of the University of Queensland Medical Society has been appointed to the committee.

University of Queensland Medical Society.—At the request of this society it is proposed to arrange talks on various practical aspects of general practice, which will be given by members of the Association. It has also been suggested that students spend a short period, prior to graduation, as assistant to a general practitioner.

Harold Plant Memorial Prize, 1944.—This prize was presented to Henry Malcolm Whyte, M.B., B.S., by the President of the Branch on September 1 at the Jackson Lecture.

Eustace Russell Memorial Prize, 1944.—The conjoint winners were L. W. Alderman, M.B., B.S., and R. M. Ferguson, M.B., B.S. A special donation to the fund was given by a member of the Council in order that both winners would receive the full value of the prize.

William Nathaniel Robertson Medal.—The winner of the medal for 1944 was H. M. Whyte, M.B., B.S.

The Joseph Bancroft Memorial Lecture.

The 1944 lecture was delivered on Friday, June 2, by Air Vice Marshal Victor Hurley, C.M.G., V.D., M.D., his subject being "The Role of Medical Services in Modern Warfare, with a Review of some of the Medical Problems of the Present World War". There was an attendance of 107 members and guests. A vote of thanks was moved by Dr. S. F. McDonald, and the President presented the Joseph Bancroft Memorial Medal to the lecturer.

The Jackson Lecture.

On September 1, 1944, Dr. Alan E. Lee delivered the Jackson Lecture entitled "The History of Appendicitis in Australia", which gave a very interesting survey of the subject over a period of sixty years.

Visit of Brigadier Sir Howard Florey.

A lecture on penicillin was delivered by Sir Howard Florey on Friday, September 15, in the Medical School of the University of Queensland, at what must have been one of the largest meetings ever held by the Branch. There was an attendance of between 360 and 380, of whom approximately 200 were members of the Branch.

Prior to the lecture, the President and members of the Council entertained Sir Howard Florey at dinner.

Red Cross Society Christmas Appeal.

A special appeal was made to members of the Branch through our representative on the Red Cross Society Appeal Committee, which resulted in the sum of £369 3s. being donated.

Social.

Air Vice Marshal Victor Hurley was entertained at dinner by members of the Council prior to the Bancroft Memorial Lecture on June 2.

QUEENSLAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

(INCORPORATED.)

Balance Sheet as at November 15, 1944.

LIABILITIES.	£ s. d.	£ s. d.
Fixed Liabilities—		
Loan from Queensland Medical Land Investment Co. Limited		4,656 0 0
Current Liabilities—		
Subscriptions for Remittance to: British Medical Association, London	31 5 2	
Australasian Medical Publishing Company Limited, Sydney	30 9 0	
		61 14 2
Association Funds—		
Accumulation Account	4,891 2 9	
Sinking Fund	374 1 3	
Reserve for Dinners, Entertainments, etc.	28 8 0	
		5,293 12 0
		£10,005 6 2

ASSETS.	£ s. d.	£ s. d.
Fixed Assets, at cost, less depreciation—		
Land and Buildings: "B.M.A. House"	2,477 8 2	
Library	150 0 0	
Typewriters, Book-cases, Balopticon and Furniture	93 7 2	
Queensland Medical Land Investment Co. Ltd.—5,950 shares of £1 each paid to 10s. each—at cost	2,975 0 0	
Australian Consolidated Inscribed Stock—		
3½% maturing 1959	1,500 0 0	
3½% maturing 1960	300 0 0	
British Medical Agency of Queensland Proprietary Limited—257 shares of £1 each, fully paid—at cost	257 0 0	
Australasian Medical Publishing Company Limited—5% Debentures—at cost	55 0 0	
Bancroft Medals and Collar	4 10 0	
		7,812 5 4
Current Assets—		
Sundry Debtors	650 0 0	
Electric Light Deposit	6 0 0	
English, Scottish and Australian Bank Ltd., Credit Balance: Current Account	1,161 4 8	
Cash in hand	1 14 11	
		1,818 19 7
Sinking Fund Investments—		
Australian Consolidated Inscribed Stock:		
3½% maturing 1951—at cost	278 3 3	
3¼% maturing 1960	90 0 0	
Commonwealth Savings Bank, Brisbane, Credit Balance	5 18 0	
		374 1 3
		£10,005 6 2

We have compared the above Balance Sheet with the Books, Accounts and Vouchers of the Queensland Branch of the British Medical Association (Incorporated), and have obtained all the information and explanations we have required. The Register of Members and other records which the Association is required to keep by the Companies Acts of 1941-42, or by its Articles, have, in our opinion, been properly kept.

In our opinion, the Balance Sheet is properly drawn up to exhibit a true and correct view of the state of the Association's affairs as at 15th November, 1944, according to the best of our information and the explanations given us, and as shown by the books of the Association.

R. G. GROOM & COMPANY,
Chartered Accountants (Aust.),
Auditors.

(Sgd.) J. G. WAGNER,
Hon. Treasurer.

Brisbane, 18th November, 1944.

Revenue Account for Twelve Months ended November 15, 1944.

EXPENDITURE.	£ s. d.	£ s. d.	INCOME.	£ s. d.	£ s. d.
November 15, 1944			November 15, 1944.		
To Branch Expenses	771 5 9		By Branch and Organization Fund Subscriptions		1,938 9 6
„ Contribution to Federal Council, Expenses	374 17 0		„ Australasian Medical Publishing Company, Limited—		
„ Library Expenditure	35 9 2		Interest on Debentures	2 15 0	
„ Depreciation of Office Equipment	9 17 4		„ Sale of Nutrition Pamphlets	7 15 2	
		1,191 9 3			10 10 2
„ Expenses, B.M.A. House—			„ Interest—		
Rates, Land Tax, Insurance, Repairs and Sundries	142 4 5		Commonwealth Government Inscribed Stock—3½%, maturing 1959		43 6 9
Cleaning	78 10 0				
Depreciation, Building	51 8 10				
	272 3 3				
Less Rents received	249 0 0				
		23 3 3			
„ Accumulation Account—					
Profit for year transferred		777 13 11			
		£1,992 6 5			£1,992 6 5

GENERAL FUND.

Statement of Receipts and Payments for Twelve Months ended November 15, 1944.

RECEIPTS.	£ s. d.	£ s. d.	PAYMENTS.	£ s. d.	£ s. d.
To Funds at November 16, 1943—			By Amounts remitted on account of Subscriptions Collected to—		
English, Scottish and Australian Bank Ltd.—Current Account	837 10 9		British Medical Association, London	787 6 3	
Cash in Hand	12 16 11		Australasian Medical Publishing Company, Limited, Sydney	551 0 0	
		850 7 8			1,338 6 3
„ Subscriptions—			„ Amount Invested in War Loan—3½% Inscribed Stock maturing 1960		300 0 0
For remittance to British Medical Association, London	778 7 9		„ General—		
For remittance to THE MEDICAL JOURNAL OF AUSTRALIA, Sydney	547 5 0		Rates to December 31, 1944	128 16 8	
Queensland Branch Subscriptions	914 15 0		Contributions to Federal Council, 1944 Expenses	374 17 0	
Organization Fund, Queensland Branch	1,029 1 0		Library Expenditure	35 9 2	
		3,269 8 9	Land Tax	10 18 9	
„ General—			Dinner Expenses, 1943-1944	3 9 2	
Rent:			Subscriptions refunded	7 12 0	
Basement and garage £26 0 0					561 2 9
Aust. Trained Nurses' Association 6 0 0			„ Branch Expenses—		
Aust. Physiotherapy Association 2 0 0			Salaries, Audit and Honoraria	540 3 11	
Royal Australasian College of Surgeons 2 0 0			Printing and Stationery	55 1 1	
Medical Defence Society 5 0 0			Postages and Duty Stamps	82 17 8	
	41 0 0		Telephone Rental and Calls	27 0 11	
Sale of Nutrition Pamphlets	7 15 2		Electric Light	7 2 6	
Australasian Medical Publishing Company, Limited—Interest on Debenture	2 15 0		Bank Charges, Meeting Expenses and Sundries	58 19 8	
Interest on Commonwealth Inscribed Stock	43 6 9			771 5 9	
		94 16 11	Fittings for Basement		
			Building Repairs and Maintenance	2 9 0	
			Cleaning	78 10 0	
					852 4 9
			„ Funds at November 15, 1944—		
			English, Scottish and Australian Bank Ltd., Brisbane	1,161 4 8	
			Cash in Hand	1 14 11	
					1,162 19 7
		£4,214 13 4			£4,214 13 4

To give members of the Branch an opportunity of showing their appreciation of the work and hospitality of colleagues in the United States Army Medical Services, a dinner was tendered to them at Lennon's Hotel on July 27, which proved a great success. There were 115 visitors and members of the Branch present.

Finance.

The year's operations have resulted in a credit balance. As mentioned in previous annual reports, members must keep in mind the necessity of making provision for increasing expense which is being incurred for organization purposes, and stand behind the Council to the utmost.

Conclusion.

The length of the annual report and the wide range of subjects it covers will convince the most sceptical that the Council has not been idle.

The report is a tribute to the energy and ability of the Secretary (Mrs. Spooner) and her staff, and I would join with all my predecessors in office in acknowledging with thanks their ever-ready help.

I desire at the same time to express my appreciation of the whole-hearted support given to me throughout the year by the members of a very energetic and experienced Council.

The work that has occupied most of our lengthy meetings has come from the Federal Council, and it seems to be increasing in bulk and importance.

It will be noticed, too, that the Branch has been associated with a number of discussions in which questions of public health have been involved and public interest has been aroused—questions in which the public needs an authoritative lead which our Association should be ready to give. We do not always see eye to eye with the powers that be. It is suggested that this is because our interest is based on unbiased scientific grounds.

(Signed) L. P. WINTERBOTHAM.
President.

FINANCIAL STATEMENTS.

Dr. J. G. Wagner presented the balance sheet and financial statement and moved its adoption. He commented on the healthy financial condition of the Branch and took occasion to remind members of the existence of the Queensland Medical War Benefit Fund, which still needed their support. Seconding the adoption of the financial statement, Dr. John Bostock referred to the Branches' medico-political commitments. There was need for a whole-time medical secretary for Queensland. He would be prepared to pay a higher subscription if others did likewise. Dr. F. W. R. Lukin supported him. Dr. F. Arden said that if the annual subscription were raised further it would deter young graduates from joining the Branch. Funds for medico-political purposes should be provided by the more senior members. The financial statements were adopted.

On the motion of Dr. F. W. R. Lukin the meeting made a recommendation to the incoming Council that attention be given to raising the Branch subscription, with special consideration for junior members.

ELECTION OF OFFICE-BEARERS.

The President announced the results of the election of office-bearers and members of the Council.

President: Dr. H. W. Horn.
President-Elect: Dr. J. W. Wagner.
Past President: Dr. L. P. Winterbotham.
Honorary Secretary: Dr. Norman Sherwood.
Councillors: Dr. Felix Arden, Dr. J. G. Avery, Dr. E. W. Casey, Dr. R. B. Charlton, Dr. D. Gifford Croll, Dr. Milton Geaney, Dr. L. T. Jobbins, Dr. Alan E. Lee, Dr. F. W. R. Lukin, Dr. C. C. Minty, Dr. J. G. Morris, Dr. Mervyn S. Patterson, Dr. T. A. Price, Dr. W. H. Steel.

ETHICS COMMITTEE.

Dr. Alex. Marks, Dr. G. P. Dixon, Dr. M. Graham Sutton, Dr. L. J. J. Nye and Surgeon Commander Gavin Cameron were reelected members of the Ethics Committee.

ELECTION OF AUDITORS.

Messrs. R. G. Groom and Company were reelected auditors.

OFFICE STAFF.

On the motion of Dr. W. H. Steel, seconded by Dr. H. W. Horn, a vote of thanks to the office staff was carried.

THE HONORARY SECRETARY.

The President then thanked the retiring Honorary Secretary (Dr. Steel), describing him as "always very bashful, always very helpful, always very willing to undertake more work".

INDUCTION OF PRESIDENT.

Dr. L. P. Winterbotham then inducted Dr. H. W. Horn to the chair.

PRESIDENT'S ADDRESS.

Dr. H. W. Horn read his address (see page 77).

VOTES OF THANKS.

The meeting concluded with votes of thanks to the retiring Council moved by Dr. J. Bostock and seconded by Dr. E. O. Marks, and to the retiring President, Dr. L. P. Winterbotham, moved by Dr. H. W. Horn from the chair and supported by Dr. F. W. R. Lukin and Dr. J. G. Wagner.

National Emergency Measures.

MEDICAL CERTIFICATES REQUIRED IN SUPPORT OF APPLICATIONS FOR VARIOUS CIVILIAN REQUIREMENTS.

SINCE the inception of rationing of goods in short supply under wartime conditions, there has been an increasing demand for medical certificates to cover supply of items which have some relation, often slight, to health or sickness. This has given rise to criticism from busy practitioners and the matter has been kept under constant review.

In a circular letter to all members of the medical profession in Australia, dated March 31, 1943, the Director-General of Health stated that he had obtained an assurance from all Commonwealth authorities that certificates asked by their departments from medical men would relate only to personal health and allied matters. Recently, the Civilian Requirements Board of the Department of War Organization of Industry has cooperated with the Commonwealth Department of Health in an inquiry with a view to further simplifying procedure where medical certificates are still being requested in support of applications for civilian requirements in short supply.

The goods (other than foods and drugs) for which a prospective purchaser is sometimes asked to produce a medical certificate include the following: refrigerators, telephone installation, radiators, cooking appliances, brandy, enema (rubber), occlusive diaphragm, hot water bags, rubber tubing, waterproof sheeting, douche cans, rubber gloves, olive oil, corsets, sandshoes, agarol, adhesive plaster.

The following information has been obtained by inquiry from the departments that are concerned in the supply of these goods.

Refrigerators (Department of Import Procurement).—No demand has been made by this department that a medical certificate must be supplied by an applicant for the release of a refrigerator. Quite a number of applications are received accompanied by a certificate, and it is apparent that an impression exists that a medical certificate will enhance the chance of success. The demand for refrigerators is greatly in excess of supply, and it is difficult to distribute those available to the most deserving cases. Medical certificates, where the condition of the patient warrants a refrigerator, have proved helpful, but the furnishing of them is entirely a matter between the applicants and their medical advisers.

Telephones (P.M.G.).—There is a serious shortage of telephone equipment and manpower is very limited. Consequently an embargo on the supply of telephone services of a non-essential character was introduced. In order to avoid imposing serious hardship or endanger the life of any person it was agreed to give sympathetic consideration to any application which was supported by a medical certificate. Preferential treatment for pre-natal cases, if supported by a medical certificate, is granted. No impression is created by the department in the minds of intending applicants that all a person has to do is to produce a medical certificate. Where, however, an application is made on the grounds of illness or pregnancy the intending subscriber is informed that if the doctor attending the patient agrees to furnish a medical certificate the matter will receive further consideration.

Radiators and Cooking Appliances (Department of War Organization).—No medical certificate is required, though the production of a certificate may provide an additional reason for the granting of a permit.

Brandy (Trade and Customs Department).—Any member of the public is eligible to procure a bottle in the ordinary way without a medical certificate provided supplies are available. The quantity of spirits for civilians is limited under the provisions of the Control of Liquor Order, and with a view to assisting persons concerned to obtain brandy for medical purposes the department arranges to facilitate the supply of the required quantity on the production of a medical certificate. Early in 1944 the same concession was extended to stout, rum and other liquors.

Enema (Rubber), Occlusive Diaphragm, Hot Water Bags.—The Department of Supply and Shipping has advised that it could not assist by the removal of any of these items from the list of those for which medical certificates are required.

Remaining Goods Listed Above.—These are not under departmental control, and any method of rationing used has been imposed by individual traders.

Post-Graduate Work.

COURSES IN MELBOURNE.

THE Melbourne Permanent Post-Graduate Committee announces that courses of instruction in physiology and pathology for the first part M.D., in anatomy and physiology for the first part M.S., and pathology for the second part M.S. will commence at the Melbourne University on March 14, 1945.

Courses of clinical instruction for the second part M.D. and M.S. are at present being held and will be repeated during the year.

A course in obstetrics will be conducted at the Women's Hospital, Carlton, from May 26 to June 9, 1945. Residence will be provided for a limited number of applicants.

Those desiring to undertake any of these courses, or clinical instruction in any branch of medicine, should communicate with the Honorary Secretary, Dr. E. Graeme Robertson, 33, Collins Street, Melbourne.

Dr. F. M. Burnet, Director of the Walter and Eliza Hall Institute of Research in Pathology and Medicine, will deliver a series of six evening lectures in July, 1945, on the background of infectious diseases in man: "General Principles: Epidemiology of Human Infections", "Diphtheria, Measles and Rubella", "Poliomyelitis", "Rheumatic Fever", "Respiratory Infections", "Tuberculosis". Further details will be announced later.

Correspondence.

INJURIES BY UNKNOWN AGENTS TO BATHERS IN NORTH QUEENSLAND.

SIR: In the *Australian Journal of Science* (Volume V, Number 6, June, 1943), McNeill and Pope lay much stress on the fact that stings in the past inflicted on bathers in North Queensland have been almost invariably by Press and residents alike attributed to the Portuguese man-o'-war, sometimes known as bluebottle, a species of *Physalia*, one of the Siphonophores. This was certainly true in the Cairns district up to 1935, when the Registry of Injuries Caused by Plants and Animals was first established at Cairns as the result of a British Medical Association conference in that city, and an effort was made to study such problems on the spot.

The injuries caused by the *Physalia* are quite easily and definitely recognized. The linear wheals, often multiple like streaks of lightning on the part afflicted, are unmistakable and the victim will direct attention at once to these. Like the familiar injuries seen frequently about Sydney, these are likewise found common amongst North Queensland bathers. McNeill and Pope's assertion that, "Admittedly, on one or two rare occasions, victims of their stings have died, but it was found in every one of these cases that the patient already suffered from some grave disability . . . or old age", is a dogmatic statement, which will probably need modification in the light of further experience. Post-mortem examinations did disclose in the two fatal cases from this region some pathological intrathoracic changes, but the patients previously to the injuries appeared to be well.

However, as soon as the registry was started, not only were *questionnaires* sent out to all medical men practising in tropical Queensland, but detailed examinations were made of the numerous victims which took place every summer, the earliest recorded being December 5 and the latest February 6, the vast majority being during the month of January. The cooperation of the Cairns centre of the Queensland Ambulance and Transport Brigade was particularly helpful in reporting these casualties and thus assisting in this inquiry.

It was soon very evident that the great majority of the injuries were produced, certainly not by the *Physalia*, but by some other as yet unknown agent, and repeated efforts were made to discover what this agent was, and it was strongly suspected that some jelly fish, probably a very small one, was responsible.

Despite the report of a fatal case at Darwin with the securing of the specimen of the medusa responsible which is now in the Museum of Tropical Medicine in the University of Sydney, proof is still lacking that this particular species has been responsible for the numerous casualties which occur in North Queensland. With few exceptions, most of the victims report that they have not suffered from similar mishaps previously. It is likewise possible that more than one species is the offending agent, and this is suggested by the variations in the clinical histories.

The most striking features of them were, firstly, the absence of any wheal so typical of the *Physalia*, or indeed any very obvious mark; in practically every case, the mark or puncture was so small—smaller than that of a flea bite and without any wheal—that it was particularly difficult to discern anything at all, even when the victim drew attention to it.

The pain usually—but not invariably—starts suddenly, the victim receiving a local sensation as though having been stung by a bee or wasp. At other times the pain at the site of the sting may be slight or insignificant or apparently altogether absent, while in some cases the victim may be quite unaware that he has been stung at all. Usually, however, the victim is able to reach the edge of the water, perhaps with difficulty, and then sinks on the beach absolutely prostrated and has to be removed by friends or bystanders. By this time intense backache, the most distressing symptom of all, starts, followed by pain in the stomach and aches all over, attended by retching and vomiting, necessitating the use of opiates. The patient is seriously ill for a day or two, and ultimately recovers a few days later. Several cases are recorded in which the symptoms are delayed for a considerable time after the victim has left the water.

Rigidity of the abdominal and sometimes other muscles is often present, and frequently abdominal, cremasteric, patellar and plantar reflexes are abolished.

The reporters in the early cases usually attributed the symptoms to the *Physalia*, but later on, the ambulance staff and many residents were likewise convinced that some other agents were responsible, and great efforts were made to persuade witnesses and bystanders to look out for any jelly fish in the neighbourhood of the victim. The victim himself, of course, in all cases is much too ill to be concerned with such attention, and despite repeated efforts, no such medusa could ever be produced. However, with better dissemination of knowledge of these things amongst frequenters of the beach, there is no reason why such a search should not ultimately be successful, but so far the causal agent has not been satisfactorily demonstrated.

Yours, etc.,

H. FLECKER.

Cairns,
Undated.

THE RED CROSS BLOOD TRANSFUSION SERVICE AND HYPERTENSIVE BLOOD DONORS.

SIR: At various times many medical practitioners have referred hypertensive patients to the Red Cross Blood Transfusion Service and have requested that a quantity of blood be removed.

The Blood Transfusion Service has appreciated the desire of the practitioners to assist both the patient and the service, but in many instances has been unable to accept such subjects as blood donors. The service does not wish to question the value of blood removal in hypertensive patients, but has noted that the incidence of reactions is higher in hypertensive patients than in normal donors. The majority of the reactions are delayed and may not appear until some hours have elapsed after the blood donation. Giddiness, fainting, nausea, vomiting, dyspnœa and weakness are the common manifestations, but cerebral vascular complications have been reported in four cases. These may have been unrelated to the removal of blood, but, nevertheless, it is considered unwise to accept hypertensive subjects as blood donors.

No attempt is made here to explain the mechanism of these reactions. It is probable, however, that such reactions are not as common, or as serious, when the hypertensive donor is permitted to remain recumbent for some hours after the removal of blood. Unfortunately the Red Cross Blood Transfusion Service has not the facilities to enable a donor to remain recumbent for the period of time considered desirable. A donor is, therefore, not accepted if the systolic blood pressure is greater than 200 millimetres of mercury. Other cases are treated individually, but evidence of arterial degeneration, even if the systolic pressure is less than 200 millimetres of mercury, renders a subject unsuitable.

Yours, etc.,

J. NEWMAN MORRIS,
Chairman, National Blood Transfusion Committee, Australian Red Cross Society.

National Headquarters Building,
122-128, Flinders Street,
Melbourne.
January 11, 1945.

Obituary.

JOHN LOCKHART GIBSON.

DR. S. F. MCDONALD writes: Among the many words of love and appreciation written by his old friends and colleagues of John Lockhart Gibson there is one point of interest which has been missed.

Indeed it is a loss—John Lockhart Gibson is dead—the kindly surgeon (I speak as a patient); the passionate upholder of scientific truth (he resigned from a public body because he doubted the intellectual honesty of a fellow member), the student of new ideas (though he did believe that no one knew anything about the treatment of syphilis since Kaposi); the zealous champion of the medical profession (look to his many years on the Queensland Branch Council) and withal a stout Christian in the faith of his fathers—those are some only of the memories that he brings up. But, too, he was a link with the past and with the great Victorians. If any of my readers is fortunate enough to have an old Edinburgh graduate near at hand they may find he has "Looking Backward" privately published by Professor John Chiene in Edinburgh, I believe just before the last war—but I have no copy by me.

Gibson, of course, was Chiene's house surgeon and retained the greatest personal admiration for him all his life.

In this little book among the other notables whom Chiene remembered is a picture of Mrs. Porter, still house sister at the time Gibson was a house surgeon. An old Scotch face—one of Raeburn's old women's faces (Mrs. Campbell, of Park, or Miss Janet Suttie)—she looks from the pages. In 1872 she was a "staff nurse" in one of Lord Lister's (or Mr. Lister as he then was, gentlemen), and to her ward after a terrible journey from Gloucester came a young crippled Englishman—William Ernest Henley—hoping that this strange unorthodox Lister would save the tuberculous ankle which threatened his future. He was operated on by Lister, and he spent twenty-two months in the Infirmary where he was visited by R. L. Stevenson and his friend Charles Baxter. He pictured this hospital—its staff and his fellow patients—Lister and not least Mrs. Porter—ending up—

> These thirty years she has been nursing here,
> Some of them under Syme, her hero still.
> Much is she worth, and even more is made of her,
> Patients and students hold her very dear.
> The doctors love her, tease her, use her skill.
> They say the "Chief" himself is half afraid of her.

And the Chief was Lister!

Now that was written in 1872 when Syme was still a very real memory in Edinburgh and Lister was steadily rising in international reputation.

There is no doubt that in many things Mrs. Porter would have horrified the modern nurse. She could not have answered any simple question on dietetics or physiology in an examination paper (in fact for quite a long time thereafter hospital nurses often could not write); she would have known nothing of sterilizing instruments or giving a hypodermic injection, but all the pictures we have of her, Henley and others show her to have possessed the supreme nursing quality—devotion to her patients. She seems, too, from other accounts to have possessed a very high degree of clinical acumen, though perhaps the advances of surgery may have left her a little behind. It is curious that of the hospital nurse of that period we possess only one full length portrait in Mrs. Gamp, who, as I read it, was not an untrained nurse, but a product of that high-grade establishment—Saint Bartholomew's.

True it is that Mrs. Porter could remember in her young days beer for breakfast and potatoes taken from a dish with the bare hands; but still all nurses could not have been as bad as Mrs. Gamp, nor all villains as bad as Jonas Chuzzlewit.

So I am inclined to think that there was virtue in the earlier hospital nurses before Florence Nightingale, as Colonel Butler has pointed out in the third volume of his History.

Henley has fallen into undeserved neglect. In a day when the British people are proudly showing that "they can take it" his genuine declaration

> Beneath the bludgeonings of chance—
> My head is bloody but unbowed

deserves remembering.

So John Lockhart Gibson takes us back, as I said, to the age of the great Victorians—to Lister and Mrs. Porter, to Henley and Florence Nightingale, to Dickens and Mrs. Gamp.

It was not a bad background, even for a man as rich mentally as he was.

ARTHUR CHARLES FREDERICK HALFORD.

WE regret to announce the death of Dr. Arthur Charles Frederick Halford, which occurred on January 13, 1945, at Brisbane, Queensland.

CECIL VALENTINE ROPER.

WE regret to announce the death of Dr. Cecil Valentine Roper, which occurred on January 17, 1945, at North Sydney.

Naval, Military and Air Force.

APPOINTMENTS.

THE undermentioned appointments, changes *et cetera* have been promulgated in the *Commonwealth of Australia Gazette*, Number 8, of January 11, 1945.

CITIZEN NAVAL FORCES OF THE COMMONWEALTH.

Royal Australian Naval Reserve.

Appointments.—George Montario Bedbrook, Peter Eric Blaubaum, Russell Geoffrey Cole, Jack Ramsay Collie, Colin Alfred Cameron Galbraith, Graeme Larkins, John Alexander LePage, Keith Gadsden McCullough, Charles William Wilson and Allen Wynn are appointed Surgeon Lieutenants, dated 20th November, 1944.

ROYAL AUSTRALIAN AIR FORCE.

Citizen Air Force: Medical Branch.

Hamilton Lister Catchlove (1419) is appointed to a commission with the rank of Flight Lieutenant with effect from 8th April, 1944, and he is promoted to the temporary rank of Squadron Leader with effect from the same date.

Dr. Charles Henry Knott, M.B., B.S. (277522), is appointed to a commission on probation with the rank of Flight Lieutenant with effect from 17th October, 1944.

Reserve: Medical Branch.

The following medical practitioners are appointed to commissions on probation with the rank of Flight Lieutenant with effect from the dates indicated: Padraic Grattan-Smith (267785), James William Stacey (277525), David McGilvery Portley (277524), Ronald Keith Smyth (257715), 1st November, 1944, Robert Cecil Black (277527), Jean Margaret Fairbairn (267787), 13th November, 1944.—(Ex. Min. No. 10—Approved 10th January, 1945.)

The following officers are transferred from the Active List, with effect from the dates indicated: Temporary Wing Commander W. M. Lemmon (251284), 11th November, 1944, Temporary Squadron Leader H. Whitaker (251709), 9th November, 1944, Temporary Flight Lieutenant G. G. Henn (294573), 10th November, 1944.—(Ex. Min. No. 16—Approved 10th January, 1945.)

Nominations and Elections.

THE undermentioned have applied for election as members of the New South Wales Branch of the British Medical Association:

Cains, Lance Joseph, M.B., B.S., 1939 (Univ. Sydney), Headquarters, 5 Australian Division, A.I.F., Australia.

Cockburn, George Robert, M.B., B.S., 1942 (Univ. Sydney), 80, Champion Road, Tennyson Point, Gladesville.

Cook, Dudley Carlyle, M.B., B.S., 1944 (Univ. Sydney), Maitland Hospital, West Maitland.
Livingston, Jean Flora, M.B., B.S., 1941 (Univ. Sydney), 10, Northcote Avenue, Killara.
Passmore, Douglas James Buchanan, M.B., 1940 (Univ. Sydney), 786, Victoria Road, Ryde.
Wilson, James Keith, M.B., B.S., 1943 (Univ. Sydney), Collarenebri District Hospital, Collarenebri.

The undermentioned has been elected as a member of the New South Wales Branch of the British Medical Association:

Feher, Stephen, M.D., 1924 (Univ. Frankfurt), M.D., 1927 (Univ. Graz), 149, Macquarie Street, Sydney.

Honours.

NEW YEAR HONOURS.

HIS MAJESTY THE KING has been pleased to confer the honour of knighthood upon Dr. Arthur Murray Cudmore, of Adelaide. We offer Sir Arthur Cudmore warm congratulations. The delay in our publication of this honour has been due to circumstances beyond our control.

Australian Medical Board Proceedings.

NEW SOUTH WALES.

THE undermentioned have been registered, pursuant to the provisions of the *Medical Practitioners Act*, 1938-1939, of New South Wales, as duly qualified medical practitioners:

Arnold, Arthur William Porter, M.B., B.S., 1944 (Univ. Sydney), Perth Hospital, Perth.
Baird, John Spier, M.B., B.S., 1944 (Univ. Sydney), 175, Macquarie Street, Sydney.
Billings, Alison Margaret, M.B., B.S., 1944 (Univ. Sydney), Bathurst District Hospital, Bathurst.
Breitner, Lothar Franz, M.B., B.S., 1944 (Univ. Sydney), Western Suburbs Hospital, Croydon.
Cameron, John, M.B., B.S., 1944 (Univ. Sydney), Cessnock District Hospital, Cessnock.
Cathers, Wilbur Jackson, M.B., B.S., 1944 (Univ. Sydney), Royal Prince Alfred Hospital, Camperdown.
Cook, Dudley Carlyle, M.B., B.S., 1944 (Univ. Sydney), Maitland Hospital, West Maitland.
Deck, Philip Arnold, M.B., B.S., 1944 (Univ. Sydney), Sydney Hospital, Sydney.
Dickinson, Dorothy Claire, M.B., B.S., 1944 (Univ. Sydney), Hornsby and District Hospital, Hornsby.
Diment, Edward Maxwell, M.B., B.S., 1944 (Univ. Sydney), Wollongong District Hospital, Wollongong.
Golden, Albert Anthony Patrick, M.B., B.S., 1944 (Univ. Sydney), Lewisham Hospital, Lewisham.
Green, Brian Geoffrey, M.B., 1944 (Univ. Sydney), Royal Hobart Hospital, Tasmania.
Jagers, Leslie James, M.B., 1944 (Univ. Sydney), Lithgow District Hospital, Lithgow.
Johnson, Oscar Henry Louis, M.B., B.S., 1944 (Univ. Sydney), Tamworth Base Hospital, Tamworth.
Kelly, James Lincoln, M.B., B.S., 1944 (Univ. Sydney), Orange Base Hospital, Orange.
Kilgour, Donald William, M.B., B.S., 1944 (Univ. Sydney), Saint Vincent's Hospital, Darlinghurst.
Laidlaw, Christopher William Francis, M.B., B.S., 1944 (Univ. Sydney), Royal Prince Alfred Hospital, Camperdown.

Books Received.

"Guide for the Tuberculous Patient", by G. S. Erwin, M.D.; 1944. London: William Heinemann Medical Books Ltd. 6¼" × 4", pp. 124. Price: 3s. 6d. net.

"Actions and Uses of Drugs: For Medical Students and Practitioners", by Norman Sapeika, B.A., M.B., Ch.B., Ph.D. (Cape Town), 1943. Cape Town: The African Bookman. 9¼" × 6¼", pp. 292.

"Cots to Coffins: Infant Mortality in Melbourne, 1943", by Gordon R. Bruns, B.Com.; 1944. Melbourne: Rawson's Book Shop. 7" × 4¾", pp. 47, with seven illustrations. Price: 1s.

Diary for the Month.

FEB. 2.—Queensland Branch, B.M.A.: Branch Meeting.
FEB. 6.—New South Wales Branch, B.M.A.: Organization and Science Committee.
FEB. 6.—New South Wales Branch, B.M.A.: Special Groups Committee.
FEB. 7.—Victorian Branch, B.M.A.: Branch Meeting.
FEB. 7.—Western Australian Branch, B.M.A.: Council Meeting.
FEB. 9.—Queensland Branch, B.M.A.: Council Meeting.
FEB. 13.—New South Wales Branch, B.M.A.: Executive and Finance Committee.
FEB. 19.—Victorian Branch, B.M.A.: Hospital Subcommittee.
FEB. 19.—Victorian Branch, B.M.A.: Finance, House and Library Subcommittee.
FEB. 20.—New South Wales Branch, B.M.A.: Medical Politics Committee.
FEB. 20.—Victorian Branch, B.M.A.: Organization Subcommittee.
FEB. 22.—Victorian Branch, B.M.A.: Executive Meeting.
FEB. 23.—Queensland Branch, B.M.A.: Council Meeting.
FEB. 27.—New South Wales Branch, B.M.A.: Ethics Committee.
FEB. 28.—Victorian Branch, B.M.A.: Council Meeting.

Medical Appointments: Important Notice.

MEDICAL PRACTITIONERS are requested not to apply for any appointment mentioned below without having first communicated with the Honorary Secretary of the Branch concerned, or with the Medical Secretary of the British Medical Association, Tavistock Square, London, W.C.1.

New South Wales Branch (Honorary Secretary, 135, Macquarie Street, Sydney): Australian Natives' Association; Ashfield and District United Friendly Societies' Dispensary; Balmain United Friendly Societies' Dispensary; Leichhardt and Petersham United Friendly Societies' Dispensary; Manchester Unity Medical and Dispensing Institute, Oxford Street, Sydney; North Sydney Friendly Societies' Dispensary Limited; People's Prudential Assurance Company Limited; Phœnix Mutual Provident Society.

Victorian Branch (Honorary Secretary, Medical Society Hall, East Melbourne): Associated Medical Services Limited; all Institutes or Medical Dispensaries; Australian Prudential Association, Proprietary, Limited; Federated Mutual Medical Benefit Society; Mutual National Provident Club; National Provident Association; Hospital or other appointments outside Victoria.

Queensland Branch (Honorary Secretary, B.M.A. House, 225, Wickham Terrace, Brisbane, B.17): Brisbane Associated Friendly Societies' Medical Institute; Bundaberg Medical Institute. Members accepting LODGE appointments and those desiring to accept appointments to any COUNTRY HOSPITAL or position outside Australia are advised, in their own interests, to submit a copy of their Agreement to the Council before signing.

South Australian Branch (Honorary Secretary, 178, North Terrace, Adelaide): All Lodge appointments in South Australia; all Contract Practice appointments in South Australia.

Western Australian Branch (Honorary Secretary, 205, Saint George's Terrace, Perth): Wiluna Hospital; all Contract Practice appointments in Western Australia.

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